Install Drivers

Install Programs

Natural Color

Please read the following safety instructions as they are designed to prevent damage to property and harm to the user.

Warning / Caution

Failure to follow directions noted by this symbol could result in bodily harm or damage to equipment.

Notational Conventions

Prohibited

Important to read and understand at all times

Do not disassemble

Disconnect the plug from the outlet

Do not touch

Grounding to prevent an electric shock

Power

When not used for extended period of time, set your computer to DPMS.
If using a screen saver, set it to the active screen mode.

Do not use a damaged or loose plug.

- This may cause an electric shock or fire.

Do not pull the plug out by the wire nor touch the plug with wet hands.

- This may cause an electric shock or fire.

Use only a properly grounded plug and receptacle.

- An improper ground may cause electric shock or equipment damage.

Do not excessively bend the plug and wire nor place heavy objects upon them, which could cause damage.

- This may cause an electric shock or fire.

Do not connect too many extension cords or plugs to an outlet.

- This may cause fire.

Installation

Put your monitor in a location with low humidity and a minimum of dust.

- Failure to do so may cause an electric shock or fire inside the monitor.

Do not drop the monitor when moving it.

- This may cause damage to the product or human body.

Place the monitor on a flat and stable surface.

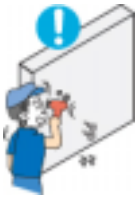
- The monitor may cause injury by falling.

Set down the monitor carefully.

- The monitor could be damaged or broken.

Do not place the monitor face down.

- The TFT-LCD surface may be damaged.



Installing a wall bracket must be done by a qualified professional.

- Installation by unqualified personnel may result in injury.
- Always use the mounting device specified in the owner's manual.

Leave a space for ventilation between the product and the wall.

- Poor ventilation may cause the interior temperature to rise and lead to fire.

To prevent rainwater from running along the outdoor antenna cable and entering the house, be sure the outdoor portion of the cable hangs down below the point of entry.

- If rainwater enters the product, it may cause an electric shock or fire.

If you are using an outdoor antenna, be sure to put sufficient distance between your antenna and the electrical wires nearby so that they would not come in contact with each other in case the antenna is knocked over by strong wind.

- A knocked-over antenna may cause injury or an electric shock.

Clean

When cleaning the monitor case or the surface of the TFT-LCD screen, wipe with a slightly moistened, soft fabric.

Do not spray water or detergent directly on the monitor.

- This may cause damage, electric shock or fire.

Use the recommended detergent with a smooth cloth.

If the connector between the plug and the pin is dusty or dirty, clean it properly with a dry cloth.

- A dirty connector may cause an electric shock or fire.

Contact a Service Center or Customer Center for interior cleaning once a year.

- Keep the product's interior clean. Dust which has accumulated in the interior over an extended period of time may cause malfunction or fire.

Others

Do not remove cover (or back). No user serviceable parts inside.

- This may cause an electric shock or fire.
- Refer servicing to qualified service personnel.

If your monitor does not operate normally - in particular, if there are any unusual sounds or smells coming from it - unplug it immediately and contact an authorized dealer or service.

- This may cause an electric shock or fire.

Be careful not to let water drip into the monitor or expose the monitor to moisture.

- This may cause malfunction, an electric shock or fire.
- Especially avoid operating the monitor near water or outdoors where it could be exposed to snow or rain.

If the monitor is dropped or the casing is damaged, turn the monitor off and unplug the power cord.

- The monitor may malfunction, causing an electric shock or fire.
- Then contact the Service Center .

Disconnect the plug from the outlet during storms or lightening or if it is not used for a long period of time.

- Failure to do so may cause an electric shock or fire.

Do not try to move the monitor by pulling only the wire or the signal cable.

- This may cause a breakdown, electric shock or fire due to damage to the cable.

Do not move the monitor right or left by pulling only the wire or the signal cable.

- This may cause a breakdown, electric shock or fire due to damage to the cable.

Do not cover the vents on the monitor cabinet.

- Bad ventilation may cause a breakdown or fire.

Do not place water containers, chemical products or small metal objects on the monitor.

- This may cause malfunction, an electric shock or fire.
- If a foreign substance enters the monitor, unplug the power cord and contact the Service Center .

Do not use or store inflammable substances near the monitor.

- This may cause an explosion or fire.

Never insert anything metallic into the monitor openings.

- This may cause an electric shock, fire or injury.

Do not insert metal objects such as utensils, wire or drill bits, or things that catch fire easily, such as pieces of paper or matches, into the vents, or the headphone, or A/V ports on the monitor.

- This may cause malfunction, an electric shock or fire.
- Always contact the Service Center if foreign substances/objects enter into the monitor.

If you view a fixed screen for an extended period of time, residual image or blurriness may appear.

- Change the mode to energy save or set a screensaver to moving picture when you need to be away from the monitor for an extended period of time.

Adjust the resolution and frequency to the levels appropriate for the model.

- Inappropriate resolution may cause undesirable picture quality.

  17 inch - 1280 X 1024

- **Keep the volume at a proper level when you use the headphones.**
  - Excessively loud volume levels may damage hearing.

- **Keep a proper distance between your eyes and the monitor screen.**
  - Sitting too close to the monitor on a continuous basis may damage eyesight.

- **To ease eye strain, take at least a five-minute break after every hour of using the monitor**.

- **Do not use the monitor where it may be exposed to strong vibrations.**
  - Exposure to strong vibrations may be fire hazard and shorten the life of the monitor.

- **When moving the monitor, turn the power switch off and unplug the power cord.**
  Make sure that all cables, including the antenna cable and cables connecting to other devices, are disconnected before moving the monitor.
  - Failure to disconnect a cable may damage it and lead to fire or an electric shock.

- **When you remove batteries from the remote, be careful that they are not swallowed by children. Keep batteries out of the reach of children.**
  - If swallowed, see a doctor immediately.

- **When replacing batteries, place the batteries in the correct +/- polarity position as indicated on battery holder.**
  - Incorrect polarity may cause a battery to break or leak and could lead to fire, injury, or contamination (damage).

- **Use only specified standard batteries. Do not use new and used batteries together.**
  - This may cause a battery to break or leak and could lead to fire, injury, or contamination (damage).

- **Do not set a glass of water, chemicals or any small metal objects on the monitor.**
  - This may cause damage, electric shock or fire.
  - If a foreign substance gets into the monitor, disconnect the plug and then

contact a service center.

Please make sure the following items are included with your monitor.
If any items are missing, contact your dealer.
Contact a local dealer to buy optional items.

Unpacking

Option A
Monitor

Option B
Monitor & WISELINK

Manual

Quick Setup Guide

Warranty Card
(Not available in all locations)

User's Guide, Monitor Driver,
Natural Color software

Cable(Option A)

D-Sub Cable | Power Cord | Radio Antenna

Audio Cable

- Cable(Option B)

D-Sub Cable | Power Cord | Radio Antenna

Audio Cable | USB Cable

- Sold separately

DVI Cable

- Others

Remote Control | Batteries (AAA X 2) | Connecter

- Front

1. MENU

2. CH

3. - VOL +

4. ENTER/FM RADIO

5. SOURCE

6. PIP

7. Power button

8. Power indicator

9. Remote Control Sensor

1. **MENU**
   Use this button for open the on-screen menu and exits from the menu screen or closes screen adjustment menu.
2. **CH**
   Moves from one menu item to another vertically or adjusts selected menu values. In TV mode, selects TV channels.
   >>Click here to see an animation clip
3. **- VOL +**
   Moves from one menu item to another horizontally or adjusts selected menu values. Also adjusts the audio volume.
   >>Click here to see an animation clip
4. **ENTER / FM RADIO**
   ENTER : Activates a highlighted menu item.
   FM RADIO : Turns on/off FM Radio.
   In PC/DVI mode, sets only SOUND to FM Radio.
   In areas where signal is weak, noise may occur while FM radio is broadcast.
   In general VIDEO SOURCE mode, sets to FM RADIO, turning off the screen.
   >>Click here to see an animation clip
5. **SOURCE**
   Switches from PC mode to Video mode.
   Changing the source is allowed only external devices that are connected to the monitor at the time.
   To switch Screen modes:
   [PC] → [DVI] → [TV] → [Ext.] → [AV] → [S-VIDEO] → [Component]
   >>Click here to see an animation clip
   NOTE : According to broadcasting type in each country, you may not be able to select one.
   Scart is mainly used in Europe.
   For more information > Broadcasting Systems
6. **PIP (Available in PC/DVI Mode Only)**
   In PC Mode, turns on Video or TV screens in PIP Mode.
   >>Click here to see an animation clip
7. **Power button**
   Use this button to turn the monitor on and off.
8. **Power indicator**
   Power Indicator shows PowerSaver mode by green blinking.
9. **Remote Control Sensor**
   Aim the remote control towards this spot on the Monitor.

Note

See PowerSaver described in the manual for further information regarding power saving functions. For energy conservation, turn your monitor OFF when it is not needed or when leaving it unattended for long periods.

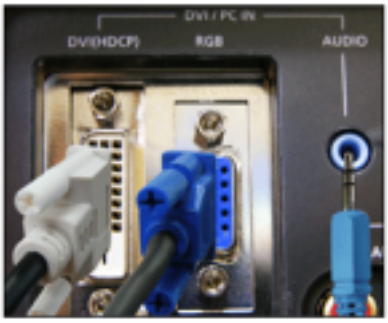
Rear

(The configuration at the back of the monitor may vary from product to product.)

1. **Power Connection Terminal**

This product may be used with 90 ~ 264VAC.

2. **PC connection terminal**



- Computer connection terminal (DVI(HDCP))
- Computer connection terminal(15 Pin D-SUB)
- Audio connection terminal

3. **COMPONENT terminal**

- DVD/DTV left / right audio connection terminal (R/L)
- DVD/DTV Component(P_R, P_B,Y) terminal

4. **FM RADIO / TV connection terminal**

- TV connection terminal
  For more information > Connecting TV
- FM RADIO ANT connection terminal
- Headphone connection terminal (Output)

5. **EXT(RGB) connection terminal**

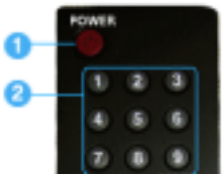
EXT(RGB) connection terminal
- Scart is mainly used in Europe.

6. **AV connection terminal**

- Left(L) / Right(R) AUDIO connection terminal (Input)
- VIDEO connection terminal (Input)
- S-VIDEO connection terminal (Input)

Note See Connecting the Monitor for further information regarding cable connections.

Remote Control



1. **POWER**
2. **CHANNEL**
3. **+100, -/--**
4. **- +**

5. **MUTE**
6. **TTX/MIX**
7. **MENU**
8. **ENTER**
9. **FM RADIO**
10. **CH/P**
11. **SOURCE**
12. **INFO**
13. **EXIT**
14. **Up-Down Left-Right Buttons**
15. **AUTO**
16. **P.MODE, M/B (MagicBright™)**
17. **P.SIZE**
18. **STILL**
19. **PIP**
20. **S.MODE**
21. **DUAL/MTS**
22. **PRE-CH**
23. **SOURCE**
24. **SIZE**
25. **POSITION**
26. **MAGIC-CH**

1. **POWER**
   Use this button to turn the monitor on and off.

2. **CHANNEL**
   Selects TV channels in the TV mode. You may use this button in PIP mode as well.

3. **+100**
   Press to select channels over 100.
   For example, to select channel 121, press "+100", then press "2" and "1".
   -/-- (One/Two-Digit channel selection)
   Use to select a channel numbered ten or over.
   Press this button, and the "--" symbol is displayed.
   Enter the two-digit channel number.
   -/-- is mainly used in Europe.

4. **- +**
   Adjusts the audio volume.

5. **MUTE**
   Pauses (mutes) the audio output temporarily.
   Displays on the lower left corner of the screen.
   The audio resumes if Mute or - + is pressed in the Mute mode.

6. **TTX/MIX**
   TV channels provide written information services via teletext.
   For more information > TTX / MIX
   TTX / MIX is mainly used in Europe.

7. **MENU**
   Use this button to open the on-screen menu and exit from the menu screen or close screen adjustment menu.

8. **ENTER**
   Activates a highlighted menu item.

9. **FM RADIO**
   Turns on/off FM Radio.
   In PC/DVI mode, sets only SOUND to FM Radio.
   In areas where signal is weak, noise may occur while FM radio is broadcast.
   In general VIDEO SOURCE mode, sets to FM RADIO, turning off the screen.

10. **CH/P**
    In TV mode, selects TV channels.

11. SOURCE

Switches from PC mode to Video mode.
Changing the source is allowed only external devices that are connected to the monitor at the time.

12. INFO

Current picture information displays on the upper left corner of the screen.

13. EXIT

Exits from the menu screen.

14. Up-Down Left-Right Buttons

Moves from one menu item to another horizontally, vertically or adjusts selected menu values.

15. AUTO

Adjusts the screen display automatically.(PC MODE)

16. P.MODE, M/B (MagicBright™)

When you press this button, current mode is displayed on the lower center of the screen.

TV / AV / Ext. / S-Video /Component Mode : P.MODE(Picture Mode)
The Monitor has four automatic picture settings that are preset at the factory.
Then push button again to circle through available preconfigured modes.
(Dynamic → Standard → Movie → Custom)

PC / DVI Mode : M/B (MagicBright™)
MagicBright™ is a new feature providing the optimum viewing environment depending on the contents of the image you are watching.
Then push button again to circle through available preconfigured modes.
(Entertain → Internet → Text → Custom)

17. P.SIZE - Not available in PC/DVI Mode

Press to change the screen size.
ZOOM1, ZOOM2 are not available in 1080i(or over 720p) of DTV.

18. STILL

Press the button once to freeze the screen. Press it again to unfreeze.

19. PIP

Push the PIP button to turn PIP screen On/Off.

20. S.MODE (Sound Mode)

When you press this button, current mode is displayed on the lower center of the screen.
The Monitor has a built-in high fidelity stereo amplifier.
Then push button again to circle through available preconfigured modes.
(Standard → Music → Movie → Speech → Custom)

21. DUAL / MTS

DUAL : STEREO/MONO, DUAL I / DIAL II and MONO/NICAM MONO/NACAM STEREO can be operated depending on broadcasting type by using DUAL button on the remote control while watching TV.
Toggles MONO/STEREO, DUAL 1/DUAL 2 and MONO/NICAM MONO/NICAM STEREO
MTS : You can select the MTS (Multichannel Television Stereo) mode.
• Mono, Stereo, SAP (Separate Audio Program)
Set 'MTS' to ON to choose Mono, Stereo or SAP.

22. PRE-CH

This button is used to return to the immediately previous channel.

23. SOURCE

Selects the Video source.(PIP Mode)

24. SIZE

You can switch the Picture Size.

25. POSITION

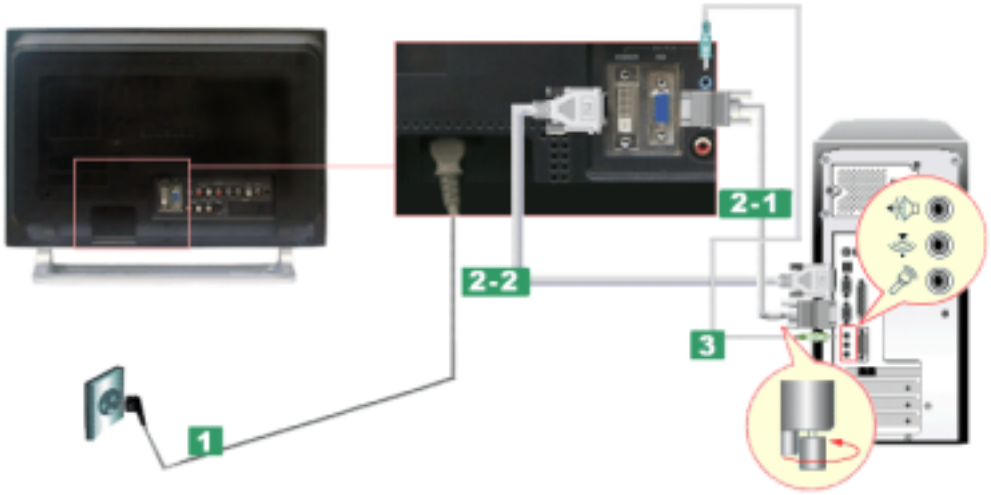
Changing the Position of the PIP window.

26. MAGIC-CH

MagicChannel enables you to watch only certain channels.
This function is available only in Korea.

Connecting the monitor

1. Connecting to a Computer



1. Connect the power cord for your monitor to the power port on the back of the monitor.
Plug the power cord for the monitor into a nearby outlet.

2-1. Using the D-sub (Analog) connector on the video card.
Connect the signal cable to the 15-pin, D-sub connector on the back of your monitor.

2-2. Using the DVI (Digital) connector on the video card.
Connect the DVI Cable to the DVI Port on the back of your Monitor.

3. Connect the audio cable for your monitor to the audio port on the back of your computer.

4. Connect the power cord for your computer and the monitor to an outlet.

5. You may enjoy clear and quality sound from the computer sound card using the monitor speakers.
(You don't need to install any separate speakers for your computer.)

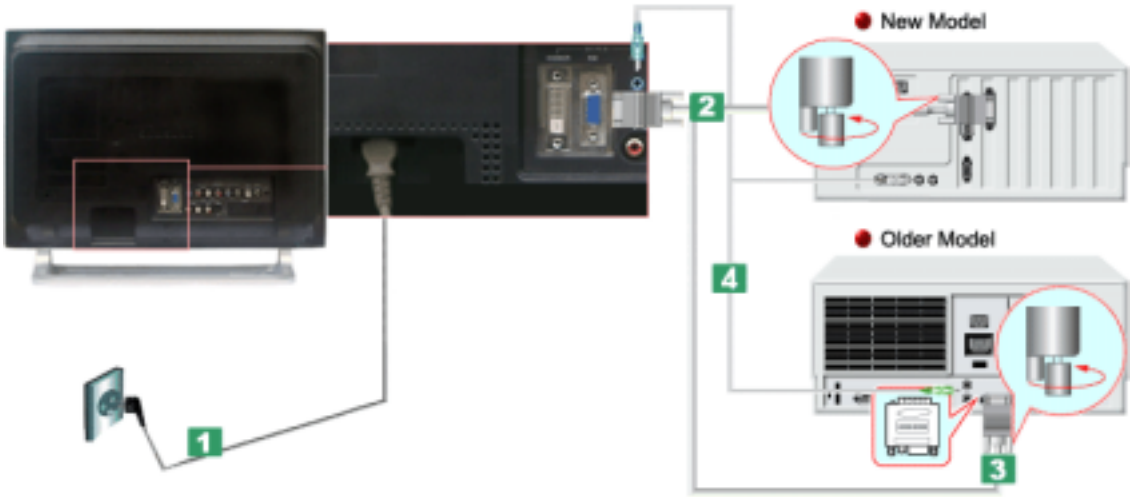
6. You may enjoy clear and quality sound from the computer sound card using the monitor speakers.
(You don't need to install any separate speakers for your computer.)

Note You may get a blank screen depending on the type of video card you are using, if you connect simultaneously both the D-sub and DVI cables to one computer.

Note You may get a blank screen depending on the type of video card you are using, if you connect simultaneously both the D-sub and DVI cables to one computer.
If you connect properly your monitor using the DVI connector but get a blank or fuzzy screen, check

Note to see if the monitor status is set to analogue. Press Source button to have the monitor double-check the input signal source.

2. Connecting to a Macintosh



1. Connect the power cord to the DC adapter and then connect the adapter jack to the DC POWER port on the monitor. (Voltage is automatically adjusted by the power adapter.)
2. Using the D-sub (Analog) connector on the video card.
   Connect the signal cable to the D-SUB port on the Macintosh computer.

3. For older model Macintoshes, you need to adjust the resolution control DIP switch on the Macintosh adapter (optional) referring to the switch configuration table shown on its rear.
4. Connect the audio cable for your monitor to the audio port on the back of your computer.
5. Turn on the monitor and Macintosh.

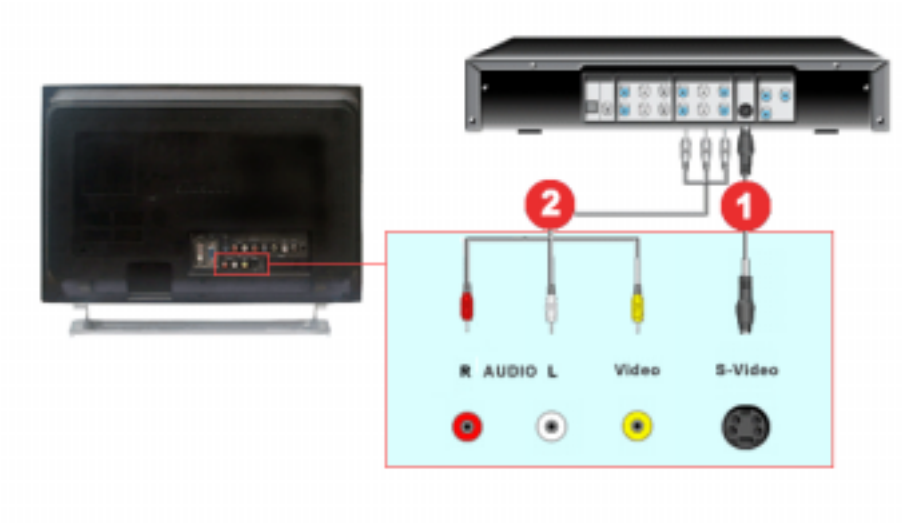
Connecting to other devices

Note This monitor allows the user to connect it to such input devices as a DVD player, a VCR or a camcorder, or a DTV or a TV without disconnecting the PC. For detailed information on connecting AV input devices, refer to User Controls under Adjusting Your Monitor.

Note The configuration at the back of the monitor may vary from product to product.

1-1. Connecting AV Devices

Note The monitor has AV connection terminals to connect AV input devices like DVDs, VCRs or Camcorders. You may enjoy AV signals as long as the monitor is turned on.



1. Input devices such as DVDs, VCRs or Camcorders are connected to the Video or S-Video terminal of the monitor using the RCA or S-Video cable.

   Note S-Video, RCA cable and EXT(RGB) cable is optional.

2. Then, start the DVD, VCR or Camcorders with a DVD disc or tape inserted.
3. Select AV or S-Video using the **SOURCE** button on the monitor's front.
4. Connect the Audio (R) and Audio (L) terminals of a DVD, VCR or Camcorders to the monitor's R and L audio input terminals using audio cables.

1-2. Connecting EXT(RGB) - It only applies to AV DEVICE that supports SCART.

Note Connect to the DVD Devices input if the device has a DVD connector.You can watch DVD simply by hooking up the DVD with the monitor as long as the power is on.

1. Connect a video cable between the EXT(RGB) jacks on the Monitor and the EXT(RGB) jacks on the DVD Player.
2. Select Ext. by pressing **SOURCE** button on the monitor.

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2. Connecting TV

Note You may view television programs on the monitor if it is connected to an antenna or a CATV cable without installing any separate TV reception hardware or software on your computer.

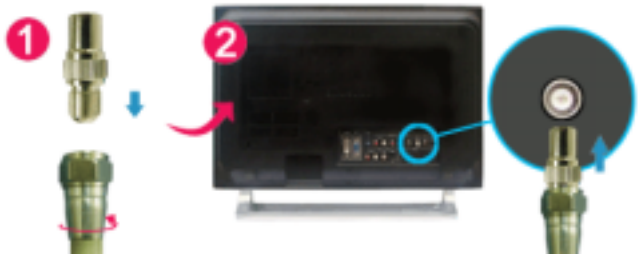
1. Connect the CATV or antenna coaxial cable to the Antenna terminal on the rear of the monitor.
   You need to use a coaxial antenna cable.

   - **When using an interior antenna terminal:**
     Check the antenna terminal on the wall first and connect the antenna cable.
   - **When using an outdoor antenna:**
     If you are using an outdoor antenna, use a professional for installation if possible.
   - **To connect the RF cable to the antenna input terminal:**
     Keep the copper wire portion of the RF cable straight.

2. Turn on the monitor.
3. Select TV using Source button among the external signal adjustment buttons.
4. Select a desired TV channel.

Note **Is weak signal causing poor reception?**
Purchase and install a signal amplifier for better reception.

Note **In areas where Antenna cable is not supported, first, attach Connecter to TV antenna .**



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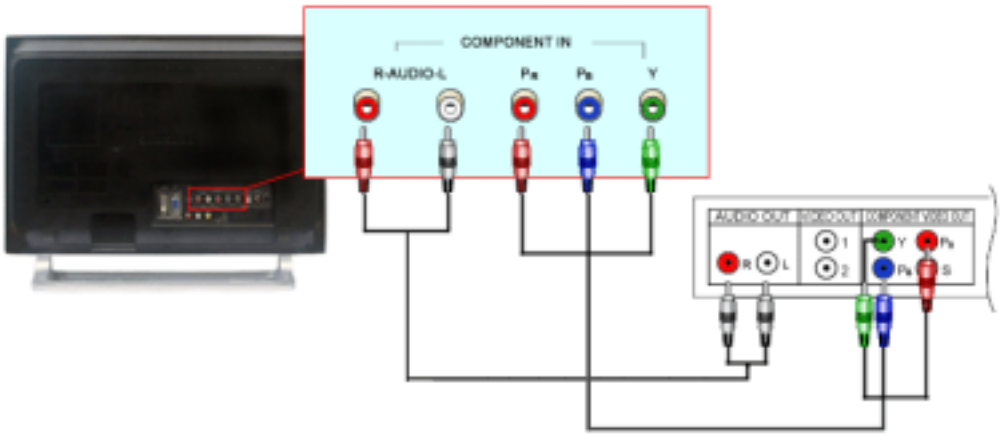
3. Connecting DVD/DTV Set Top Box

Note Connect to the DVD/DTVSet Top Box input if the device has a DVD/DTV connector. You can watch Component simply by hooking up the Component with the monitor as long as the power is on.



1. Connect the Audio (R) and Audio (L) outputs on the DVD / DTV set top box to the Audio (R) and Audio (L) inputs on the monitor using audio cables.
2. Connect a video cable between the component(P_R, P_B,Y) jacks on the Monitor and the P_R, P_B,Y jacks on the DVD / DTV set top box.

3. Select Component using the **SOURCE** button on the monitor's front.

4. Connecting Headphone

Note You may connect your Headphone to the monitor.

1. Connect your Headphone to the Headphone connection terminal.

Using the Stand

Note This monitor supports various types of VESA-standard bases. You need to either fold or remove the base in use in order to install a VESA base.

1. Folding the base

Note The monitor may be reclined from -5 to 15 degrees.

2. Attaching a base

Note This monitor accepts a 75 mm x 75 mm VESA-compliant mounting interface pad.

A. Monitor

B. Mounting interface pad

1. Turn off your monitor and unplug its power cord.
2. Lay the LCD monitor face-down on a flat surface with a cushion beneath it to protect the screen.
3. Remove four screws and then remove the Stand from the LCD monitor.
4. Align the Mounting Interface Pad with the holes in the Rear Cover Mounting Pad and secure it with four screws that came with the arm-type base, wall mount hanger or other base.

To mount the monitor on a wall, you should purchase the wall mounting kit that allows you to mount the monitor at least 10cm away from the wall surface. Contact the nearest Samsung Service Center for more information.
Samsung Electronics will not be responsible for damages caused by using a base other than those specified.

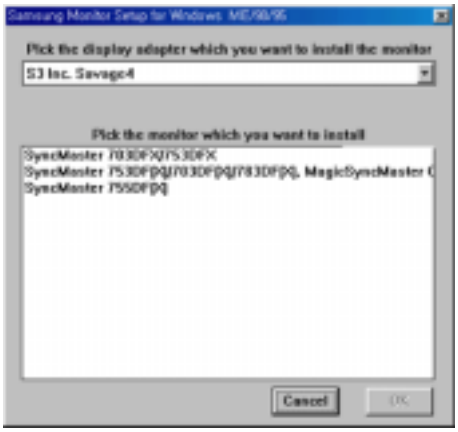
Note **When prompted by the operating system for the monitor driver, insert the CD-ROM included with this monitor. Driver installation is slightly different from one operating system to another. Follow the directions appropriate for the operating system you have.**

Prepare a blank disk and download the driver program file at the Internet web site shown here.

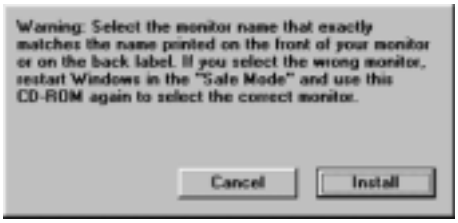
- Internet web site : http://www.samsung-monitor.com/ (Worldwide)
  http://www.samsungusa.com/monitor (USA)
  http://www.sec.co.kr/monitor (Korea)
  http://www.samsungmonitor.com.cn/ (China)

Windows ME

1. Insert CD into the CD-ROM drive.
2. Click **"Windows ME Driver"**.
3. Choose your monitor model in the model list, then click the **"OK"** button.


Pick the display adapter which you want to install the monitor
S3 Inc. Savage4
Pick the monitor which you want to install
Cancel

4. Click the **"Install"** button in the **"Warning"** window.

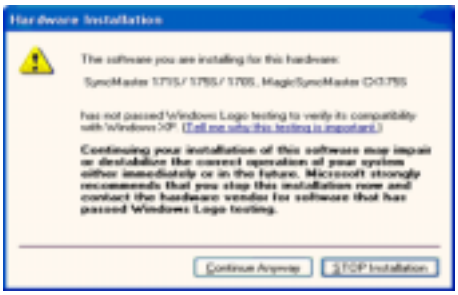

Warning: Select the monitor name that exactly matches the name printed on the front of your monitor or on the back label. If you select the wrong monitor, restart Windows in the "Safe Mode" and use this CD-ROM again to select the correct monitor.
Cancel
Install

5. Monitor driver installation is completed.

Windows XP/2000

1. Insert CD into the CD-ROM drive.
2. Click **"Windows XP/2000 Driver"**
3. Choose your monitor model in the model list, then click the **"OK"** button.

4. If you can see following message window, then click the **"Continue Anyway"** button. Then click **"OK"** button.



Note This monitor driver is under certified MS logo,and this installation doesn't damage your system.The certified driver will be posted on Samsung Monitor homepage. http://www.samsung-monitor.com/.

5. Monitor driver installation is completed.

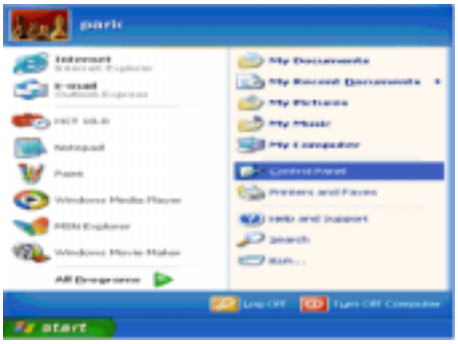
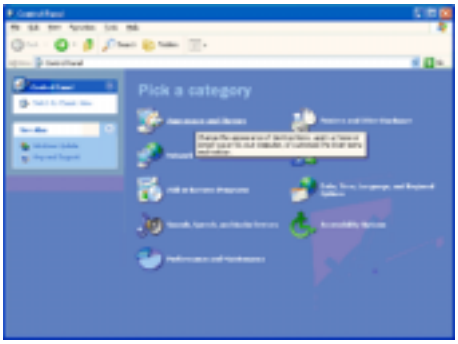
When prompted by the operating system for the monitor driver, insert the CD-ROM included with this monitor. Driver installation is slightly different from one operating system to another. Follow the directions appropriate for the operating system you have.

Prepare a blank disk and download the driver program file at the Internet web site shown here.

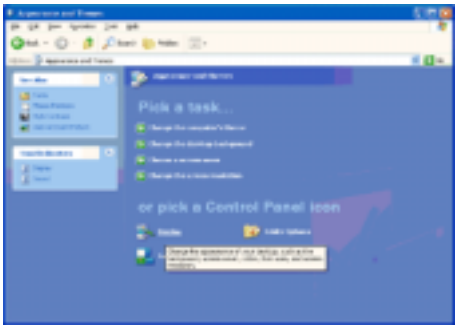
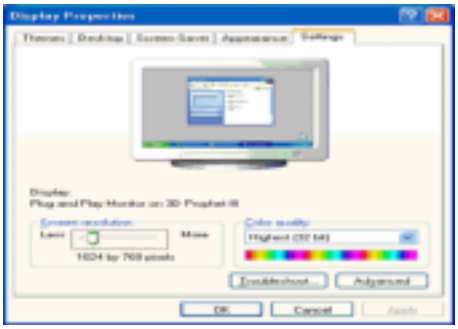
- Internet web site : http://www.samsung-monitor.com/ (Worldwide)
  http://www.samsungusa.com/monitor (USA)
  http://www.sec.co.kr/monitor (Korea)
  http://www.samsungmonitor.com.cn/ (China)

Microsoft® Windows® XP Operating System

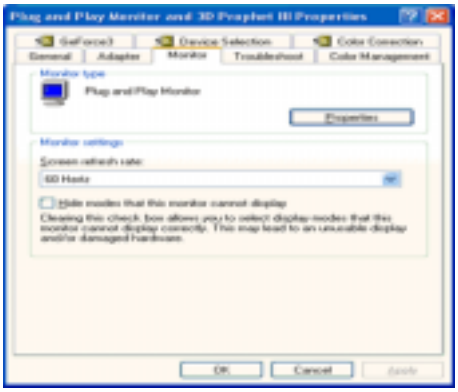
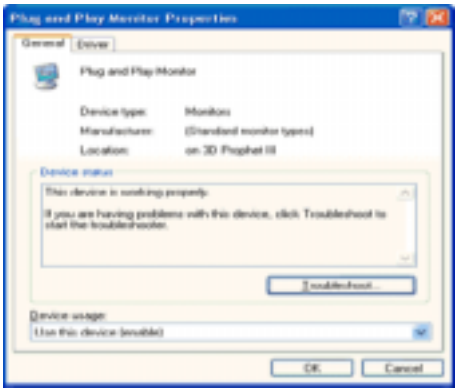
1. Insert CD into the CD-ROM driver.
2. Click "**Start**" —> "**Control Panel**" then click the "**Appearance and Themes**" icon.

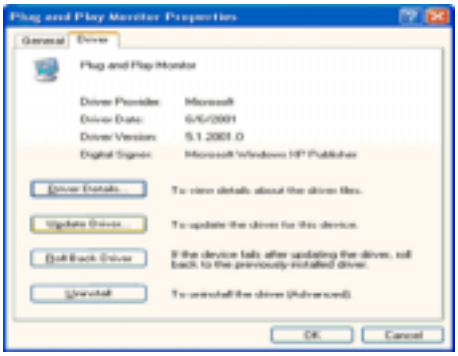
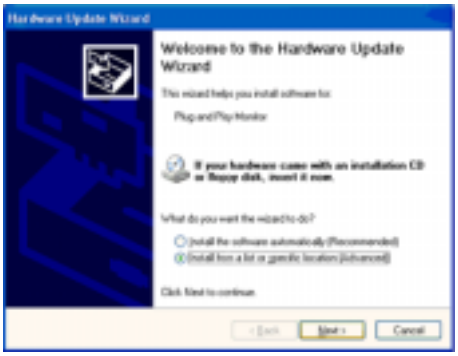
3. Click "**Display**" icon and choose the "**Settings**" tab then click "**Advanced..**".

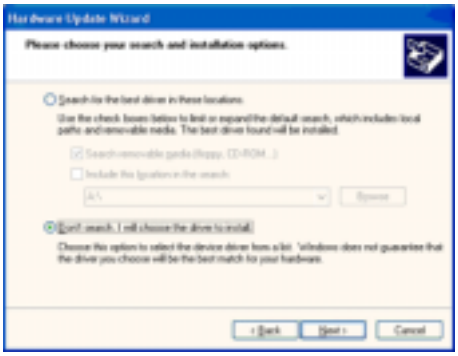
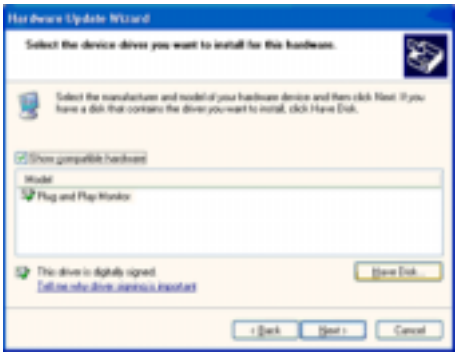
4. Click the "**Properties**" button on the "**Monitor**" tab and select "**Driver**" tab.

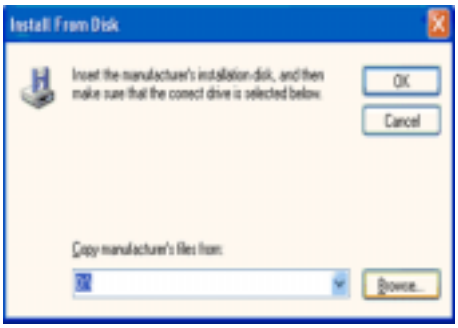
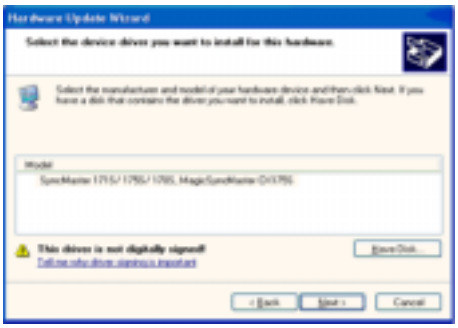
5. Click "**Update Driver..**" and select "**Install from a list or..**" then click "**Next**" button.

6. Select "**Don't search ,I will..**" then click "**Next**" and then click "**Have disk**".

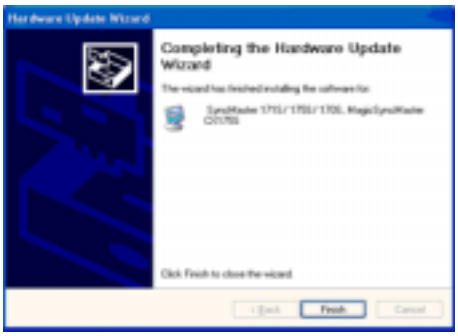
7. Click the "**Browse**" button then choose A:(D:\Driver) and choose your monitor model in the model list and click the "**Next**" button.

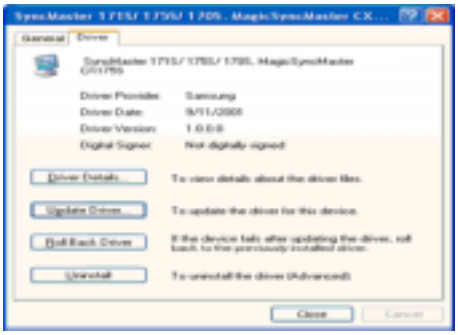



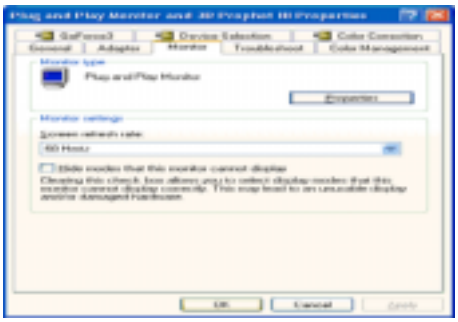
8. If you can see following message window, then click the "**Continue Anyway**" button. Then click "**OK**" button.

This monitor driver is under certified MS logo,and this installation doesn't damage your system.The certified driver will be posted on Samsung Monitor homepage.
http://www.samsung-monitor.com/

9. Click the "**Close**" button, then click "**OK**" button continually.







10. Monitor driver installation is completed.

Microsoft® Windows® 2000 Operating System

When you can see "Digital Signature Not Found" on your monitor, follow these steps.

1. Choose "**OK**" button on the "**Insert disk**" window.
2. Click the "**Browse**" button on the "**File Needed**" window.
3. Choose A:(D:\Driver) then click the "Open" button and then click "**OK**" button.

How to install

1. Click "**Start**" , "**Setting**" , "**Control Panel**".
2. Double click the "**Display**" Icon.
3. Choose the "**Settings**" tab and then click "**Advanced..**".
4. Choose "**Monitor**".
   Case1: If the "Properties" button is inactive, it means your monitor is properly configured. Please stop installation
   Case2: If the "Properties" button is active, click the "Properties" button then follow next steps continually.
5. Click "**Driver**" and then click on "**Update Driver..**" then click on the "Next" button.
6. Choose "**Display a list of the known drivers for this device so that I can choose a specific driver**" then click "**Next**" and then click "**Have disk**".
7. Click the "**Browse**" button then choose A:(D:\Driver).
8. Click the "**Open**" button, then click "**OK**" button.
9. Choose your monitor model and click the "**Next**" button then click "**Next**" button.
10. Click the "**Finish**" button then the "**Close**" button.

    If you can see the "**Digital Signature Not Found**" window then click the "**Yes**"button. And click the "**Finish**" button then the "**Close**" button.

Microsoft® Windows® Millennium Operating System

1. Click "**Start**" , "**Setting**" , "**Control Panel**".
2. Double click "**Display**" icon.
3. Select the "**Settings**" tab and click "**Advanced Properties**" button.
4. Select the "**Monitor**" tab.
5. Click the "**Change**" button in the "**Monitor Type**" area.
6. Choose "**Specify the location of the driver**".
7. Choose "**Display a list of all the driver in a specific location..**" then click "**Next**" button.
8. Click the "**Have Disk**" button
9. Specify A:\(D:\driver) then click "**OK**" button.
10. Select "**Show all devices**" and choose the monitor that corresponds to the one you connected to your computer and click "**OK**".
11. Continue choosing "**Close**" button and "**OK**" button until you close the Display Properties dialogue box.

Microsoft® Windows® NT Operating System

1. Click **Start**, **Settings**, **Control Panel**, and then double-click **Display** icon.
2. In Display Registration Information window, click Settings Tab and then click **All Display Modes**.
3. Select a mode that you wish to use (Resolution, Number of colors and Vertical frequency) and then click **OK**.
4. Click **Apply** button if you see the screen working normally after clicking **Test**. If the screen is not normal, change to a different mode (lower mode of resolution, colors or frequency).

Note

If there is no Mode at **All Display Modes**, select the level of resolution and vertical frequency by referring to the Preset Timing Modes in the user guide.

Linux Operating System

To execute X-Window, you need to make the X86Config file, which is a type of system setting file.

1. Press Enter at the first and the second screen after executing the X86Config file.
2. The third screen is for **setting your mouse**.
3. Set a mouse for your computer.
4. The next screen is for **selecting a keyboard**.
5. Set a Keyboard for your computer.
6. The next screen is for **setting your monitor**.
7. First of all, set a **horizontal frequency** for your monitor. (You can enter the frequency directly.)
8. Set a **vertical frequency** for your monitor. (You can enter the frequency directly.)
9. Enter the **model name of your monitor**. This information will not affect the actual execution of X-Window.
10. You have **finished** setting up your monitor.
    Execute X-Window after setting other requested hardware.

Natural Color

Natural Color Software Program

One of the recent problems in using a computer is that the color of the images printed out by a printer or other images scanned by a scanner or a digital camera are not the same as those shown on the monitor.
The Natural Color S/W is the very solution for this problem. It is a color administration system developed by Samsung Electronics in association with Korea Electronics & Telecommunications Research Institute (ETRI).
This system is available only for Samsung monitors and makes the color of the images on the monitor the same as the printed or scanned images.
For more information, refer to Help (F1) in the software program.

How to install the Natural Color software
Insert the CD included with the Samsung monitor into the CD-ROM Drive. Then, the initial screen of the program Natural Color will be executed. Click Natural Color on the initial screen to install the Natural Color software.
To install the program manually, insert the CD included with the Samsung monitor into the CD-ROM Drive, click the [Start] button of Windows and then select [Execute].
Enter D:\color\eng\setup.exe and then press the <Enter> key.
(If the drive where the CD is inserted is not D:\, enter the applicable drive.)

How to delete the Natural Color software program
Select **"Setting" / 'Control Panel"** on the **"Start"** menu and then double-click **"Add/Delete a program"**.
Select Natural Color from the list and then click the [Add/Delete] button.

Input

Available Mode P : PC / DVI T : TV A : AV S : S-Video C : Component

OSD	Description	Play
Source	Use to select PC, TV or other external input source connected to the Monitor. Use to select the screen of your choice. • **PC** • **DVI**: HDCP supported • **TV** • **Ext.**- EXT.(RGB)is mainly used in Europe. • **AV** • **S-Video** • **Component**	PTASC
PIP	When external A/V devices such as VCRs or DVDs are connected to the monitor, PIP allows you to watch video from those devices in a small window super-imposed on the PC Video signal. (On/Off) **While V-chip is in operation, the PIP function cannot be used.** **- Available in PC Mode Only**	

	1) PIP • **ON/ Off** : Turn the PIP Screen on or off. **2) Source** • **PC / DVI** : TV / Ext.(EXT.(RGB)is mainly used in Europe.) / AV / S-Video / Component Mode : Select the input source for the PIP. **3) Size** : Change the Size of the PIP window. If you select , in Size, Position and Transparency will not be activated. **4) Position** : Change the Position of the PIP window. **5) Transparency** • **High / Medium / Low / Opaque** : Adjust the Transparency of PIP windows.	1) PIP 2) Source 3) Size 4) Position 5) Transparency P
Edit Name	Name the input device connected to the input jacks to make your input source selection easier. • **PC** • **DVI** • **Ext.** - EXT.(RGB)is mainly used in Europe. • **AV** • **S-Video** • **Component**	P T A S C

Picture

PC / DVI Mode
When you input video signal into DVI, **TV / AV / S-Video / Component Mode**will appear in the menu.

Available Mode P : PC / DVI T : TV A : AV S : S-Video C : Component

OSD	Description	Play

MagicBright™	MagicBright™ is a new feature providing the optimum viewing environment depending on the contents of the image you are watching. Currently four different modes are available: Entertain, Internet,Text and Custom. Each mode has its own pre-configured brightness value. You can easily select one of four settings by simply pressing the MagicBright™ control button. **1) Entertain** : High Brightness For watching motion pictures such as a DVD or VCD. **2) Internet** : Medium Brightness For working with a mixture of images such as text and graphics. **3) Text** : Normal Brightness For documentations or works involving heavy text. **4) Custom** Although the values are carefully chosen by our engineers, the pre-configured values may not be comfortable to your eyes depending on your taste. If this is the case, adjust the Brightness and Contrast by using the OSD menu.	
Custom	You can use the on-screen menus to change the contrast and brightness according to personal preference. **1) Contrast** : Adjust the Contrast. **2) Brightness** : Adjust the Brightness.	
Note **If you adjust picture using Custom function, MagicBright will turn to Custom mode.**		
Color Tone	The tone of the color can be changed. **- Available in PC Mode Only** **• Cool / Normal / Warm / Custom**	
Color Control	Adjust the individual R, G, B color controls. **- Available in PC Mode Only** **1) Red** **2) Green** **3) Blue**	
Note **If you adjust picture using Color Control function, Color Tone will turn to Custom mode.**		
Image Lock	Image Lock is used to fine-tune and get the best image by removing noise that creates unstable images with jitter and shimmer. If satisfactory results are not obtained using the Fine adjustment, use the Coarse adjustment and then use Fine again. **- Available in PC Mode Only** **1) Coarse** : Removes noise such as vertical stripes. Coarse adjustment may move the screen image area. You may relocate it to the center using the Horizontal Control menu. **2) Fine** : Removes noise such as horizontal stripes. If the noise persists even after Fine tuning, repeat it after adjusting the frequency (clock speed). **3) Position** : Adjusts the screen location horizontally and vertically.	**1) Coarse / Fine** **3) Position**
Auto Adjustment	The values of Fine, Coarse, position are adjusted automatically. If you change resolution in the control panel, Auto function will be executed. **- Available in PC Mode Only**	
PIP Picture	You can adjust the PIP Screen Settings. **1) Contrast** : Adjusts the Contrast of the PIP window on the screen. **2) Brightness**	

	: Adjusts the Brightness of the PIP window on the screen. **3) Sharpness** : Adjusts the difference between the lightest and darkest areas of the PIP window. **4) Color** : Adjusts the Color of the PIP window on the screen. **5) Tint** : Adds a natural tone to the PIP window. **Available : PIP ON**	

TV / Ext. / AV / S-Video / Component Mode

Available Mode P : PC / DVI T : TV A : AV S : S-Video C : Component

OSD	Description	Play
Mode	The Monitor has four automatic picture settings ("Dynamic", "Standard", "Movie" and "Custom") that are preset at the factory. You can activate either Dynamic, Standard, Movie, or Custom. You can select "Custom" which automatically recalls your personalized picture settings. • **Dynamic** • **Standard** • **Movie** • **Custom**	
Custom	You can use the on-screen menus to change the contrast and brightness according to personal preference. **1) Contrast** : Adjusts the Contrast. **2) Brightness** : Adjusts the Brightness. **3) Sharpness** : Adjusts the difference between the lightest and darkest areas of the display. **4) Color** : Adjusts the Color of the PIP window on the screen. **5) Tint** : Adds a natural tone to the display.	
Color Tone	The tone of the color can be changed. The individual color components are also user adjustabls. • **Cool2 / Cool1 / Normal / Warm1 / Warm2**	
Size	You can switch the Size. • **16:9**	

	• **Normal** • **Zoom 1** • **Zoom 2** - ZOOM1, ZOOM2 are not available in 1080i(or over 720p) of DTV.	
Digital NR	- Digital Noise Reduction. You can turn the Noise Elimination feature On/Off. The Digital Noise Elimination feature allows you to enjoy clearer and crisper images. • **On /Off**	
Film Mode	You can turn Film Mode On/Off. The Film Mode feature offers you a theater-quality viewing experience. • **On /Off**	

Sound

Available Mode P : PC / DVI T : TV A : AV S : S-Video C : Component

OSD	Description	Play
Mode	The Monitor has a built-in high fidelity stereo amplifier. **1) Standard** : Choose Standard for the standard factory settings. **2) Music** : Choose Music when watching music videos or concerts. **3) Movie** : Choose Movie when viewing movies. **4) Speech** : Choose Speech when watching a show that is mostly dialogue (i.e., news). **5) Custom** : Choose Custom if you want to adjust the settings according to personal preference.	
Custom	The sound settings can be adjusted to suit your personal	

	preference. **1) Bass** : Emphasize low frequency audio. **2) Treble** : Emphasize high frequency audio. **3) Balance** : Allows you to adjust the sound balance between the left and right speakers.	
Auto Volume	Reduces the differences in volume level among broadcasters. • **On /Off**	
Dolby Virtual	Dolby Virtual Sound On/Off (Dolby Virtual simulates the effect of the Dolby Surround sound system, recreating the movie-theatre or concert-hall- quality sound.) • **On /Off**	
BBE	**BBE** (Barcus-Berry Electronics) recreates the natural sound and improves sound clarity through boosting high and low range frequencies. As a result, high sounds are clearer, brilliant and finely detailed while low sounds are tight, well-defined and harmonically rich. • **On /Off**	
Note **BBE and Dolby Virtual cannot be functioned at the same time.**		
Select Sound	You can select either Main or Sub when PIP is On. • **Main / Sub** **Available : PIP ON**	
FM Radio	Press the button on the front or the "FM RADIO" button on the remote control to select the "FM RADIO" feature. • **Auto Store** You can scan the frequency ranges available on your FM Radio in your area and store all the channels found automatically. • **Manual Store** You can scan the frequency ranges available on your FM Radio in your area and store all the channels found manually. **- Channel** : Chooses the Radio channel through the adjustment of up/down under the current frequency. **- Search** : The tuner scans the frequency range until the first channel or the channel that you selected is received. **- Store** : Restores the number user inputs. • **Add / Delete** Adds or deletes channels from the memory. Note If you select FM Radio, picture will turn black while FM Radio is functioning in TV, EXT, AV, S-Video, Component modes except PC, DVI modes. **Available : FM Radio ON**	Auto Store Manual Store Add / Delete

Channel

Available Mode P : PC / DVI T : TV A : AV S : S-Video C : Component

OSD	Description	Play
Auto Program	The TV automatically cycles through all of the available channels and stores them in memory. This takes about one to two minutes. In rare cases, "Auto program" may miss a few channels due to weak signals and the channels may not be added to the channel memory.	
Add/Delete	Adds or deletes channels from the memory.	
Fine Tune	Due to weak signals or an incorrect antenna configuration, some of the channels may not be tuned correctly.	
LNA	Amplifies signals when antenna reception is poor. However, if incoming signals are interfering with each other, turn off LNA as it may malfunction. • **On / Off**	

Setup

Available Mode P : PC / DVI T : TV A : AV S : S-Video C : Component

OSD	Description	Play
Area Configuration	When you turn the power on of the product for the first time since it released from a factory, menu to select location will appear. Choose the region and country where you use the monitor. This is because broadcasting type varies according to region and country. You can select broadcasting type in OSD menu as well by selecting **MENU-Setup-Area Configuration**. **Note :** This product can be used worldwide if area configuration is set up regardless of broadcasting type. **Note :** If country is not selected properly, the product may not locate channels.	T
Language	You can choose one of 2 languages. • **English, 한국어** Note : The language chosen affects only the language of the OSD. It has no effect on any software running on the computer.	P T A S C
Sleep Timer	Use to set the Monitor to be turned off automatically the set in certain minutes. (Off, 30, 60, 90, 120, 150, 180)	P T A S C
Caption	Enables or disables the Caption feature and sets the appearance of closed caption text. **1) Caption** : Off / On **2) Mode** : Caption / Text **3) Channel** : 1 / 2 **4) Field** : 1 / 2	T A S C
Menu Transparency	Changes the opaqueness of the background of the OSD. • **High** • **Medium** • **Low** • **Opaque**	P T A S C
Blue Screen	If no signal is being received or the signal is very weak, a blue screen automatically replaces the noisy picture background. If you wish to continue viewing the poor picture, you must set the "Blue screen" mode to "Off". • **On / Off**	T A S C
Reset	Picture parameters are replaced with the factory default values. **- Available in PC Mode Only** **1) Image Reset** **2) Color Reset**	1) Image Reset 2) Color Reset P

MagicChannel

Note MagicChannel : ON I OFF I RESET I PASSWORD

MagicChannel enables you to watch only certain channels.
Parents can help their children study more effectively by selectiong channels only related to learning.

Note **Be careful not to misplace the remote control since without it, to select or cancel MagicChannel is impossible.**

Note If you don't remember your pin number, turn the power off and press 'MUTE+8+2+4'(press each key within 2 seconds' interval) and then turn on the power to initialize the pin number.

Note MagicChannel should be operated only after channels are selected by Auto store Seletion.
MaginChannel cannot be operated while other external devices are connected.

Note **MaginChnannel perfomes better when the remote control is closer to the sensor.**

Using WISELINK

WISELINK is used to play Photo Files (*.jpg), Music Files (*.mp3, *.wav) and Movie Files (*.avi, *.mov) stored in the memory card on the Monitor.

What is a Memory Card?

A memory card is an auxiliary storage device used in AV equipment to exchange data between devices.
It is mainly used in digital cameras, digital camcorders,MP3 players, notebooks, and PDAs.

Memory Cards Available in WISELINK

You can use CF (Compact Flash), SMC (Smart Media Card), SD (Secure Digital),MMC (Multi Media Card), and MS (Memory Stick) in the four WISELINK slots. Confirm the card type and proper insertion direction before you insert a memory card. The correct card type is listed for each slot.

Compact Flash I

Multimedia Card (MMC)

Memory Stick

Secure Digital Card (SD Card)

Smart Media Card

If your computer is not running Windows XP, you must install the driver from the CD included with the product to run the card driver properly.

Notes: Memory Stick Pro and Memory Stick Duo are not supported.
There are different slot configurations for Compact Flash Type I and II. This product supports CF Type I.

- How to Insert a Memory Card
  Gently push the memory card into the slot. If the card is not inserted completely, it will not work.
  Insert the card in the direction indicated on the memory card.
  Note: Do not apply excessive force while inserting the card.

- How to eject a Memory Card
  Holding the tip of the card, gently pull it out.

Cautions on Memory Card Use

- Data can be damaged when a memory card is used in the presence of static electricity and/or electronic noise.
- Data can be damaged when a memory card is repeatedly inserted and ejected.
- Play speed may differ depending on the card type.
- Do not attach anything but a label in the proper place.
- Be careful to attach the label only within the proper space.
- Be careful not to make contact between the memory card terminal and metal objects.
- Do not strike, bend or drop the memory card.
- Do not dismantle or tinker with the memory card.
- Be careful to keep the memory card dry.

Cautions on using WISELINK Mode

- Do not insert foreign objects into the slot.
- Insert the memory card in the proper direction
- Do not remove the memory card when it is in use.
- The manufacturer's responsibility does not include damaged data.
  (Be careful not to corrupt data and be sure to back up files.)
- Use the slot cover so that dust and foreign objects cannot enter the slot when WISELINK is not in use.

Initialization of WISELINK Mode

Errors can occur in WISELINK mode because of the various memory card types, the various manufacturers and the type of data stored.When an error occurs, please initialize WISELINK as follows:

Method : After pressing the SOURCE button to switch into another mode, press the SOURCE button again to return to WISELINK mode. Initialization is now finished.

Files supported by WISELINK

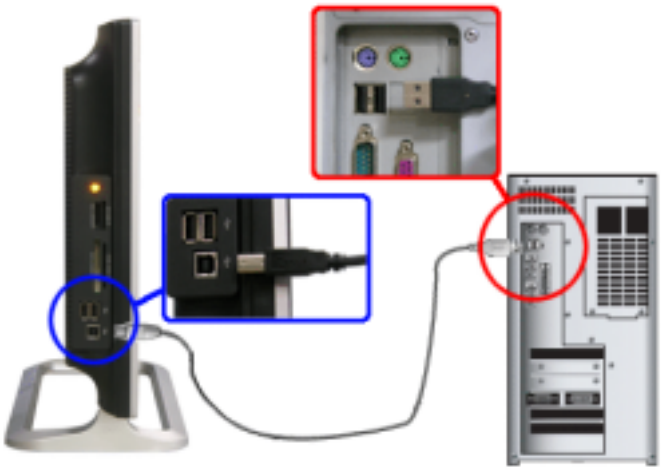
File Type	Photo Files (*.jpg)	Music Files (*.mp3, *.wav)	Movie Files (*.avi, *.mov)
File Size	JPEG images are classified into baseline JPEG. • Baseline JPEG: Files with less than 5 million pixels.	No limit to file sizes. Music Files may not play depending on the data transfer rate. • Data Transfer Rate: Files from 8 Kbps through 320 Kbps will run.	No limit to file sizes. Movie Files are classified into Motion JPEG.
Compatibility	Photo Files with (*.jpg) Extension	Music files with the (*.mp3, *.wav) Extension	Movie files with the (*.avi, *.mov) Extension
Supported Memory Card Sizes	• CF: 1GBytes • MS/MMC/SMC: 128MBytes • SD: 512MBytes An error can take place if a higher capacity memory card is used.		
Data Copying	When you download or upload data between a memory card and your home computer, follow the normal procedures. If you do not follow the proper procedures and erroneously copy data, the data will not run in WISELINK.		
Formatting the Memory Card	If you format the memory card on your computer, an error can occur in other digital devices with the formatted card. You should only format the memory card in the digital equipment using the memory card.		
Unsupported and erroneous files	For unsupported and erroneous JPEG/MP3/WAV/AVI/MOV files, It may cause errors. Do not rename unsupported files with file extensions that are supported.		

File names in the card can consist of up to 8 digits, and if they are over 8 digits, ~1,2,3,4 will be added after file names(6 digit).

Connecting WISELINK

Connecting USB port

If the computer is connected to WISELINK by a cable, such works as writing and reading data are possible at the computer source.



- Connect the upstream USB port to an appropriate USB port on your computer.
- Connect USB peripherals to the downstream USB ports on the WISELINK.

When you do writing, reading data using USB cable connected to USB port on your computer, remove cards or a cable over 20 seconds after completing the work to avoid any possible damage to the files in the card.

Switching to WISELINK Mode 1

Switching to WISELINK Mode 2

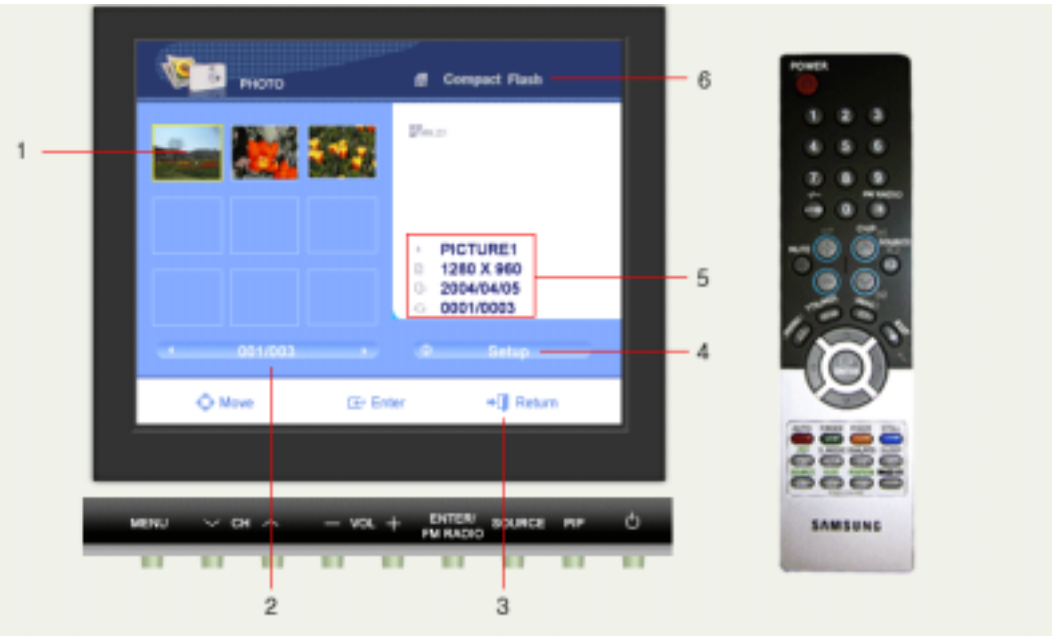
- While making a selection, information about the selected file is displayed on the right side of the screen.
- When no card is inserted, "Please Insert Card" will be displayed.
- When a new card is inserted or the inserted card is loose, the memory card selecting screen will automatically open.

- When any card other than the memory card currently in use becomes loose, "Please Insert Card" will be displayed on the center of the screen.
- A maximum of one thousand files can be displayed.
- File names are displayed in English only.
- Images edited by JPEG editors (for example: Photoshop or Paintshop) may not appear normal.

When the monitor is set to PAL type, pressing channel button will switch its' mode to TV mode automatically.

Photo Playback

JPEG file format is supported.



1. Press the ▲▼◀▶ buttons to move to the desired file and select it. Press the ENTER button and a full page image will be displayed.	4. Press the INFO button to move to the WISELINK setup.
2. The current page number out of the total pages is displayed.	5. The title, resolution, creation date, and number (current file number / total file number) for the selected image file will be displayed.
3. Press the EXIT button to return to the previous menu.	6. The selected memory card type is displayed.

- If you press the ENTER button at the photo full screen, bar setup menu will be displayed.
- When viewing still images or pausing a slide show, a screen saver will become active after a set period of time.

◉ Slide Show ○ Rotate ○ Zoom ○ Close

Slide Show	ALL FILE are played repeatedly.
Rotate	In order to display the full image on the screen, the picture size will automatically change depending on the rotational angles (90 and 270 degrees). When rotating the picture, the

	rotated image will be just shown at the photo full screen. You can rotate the image zoomed.
Zoom	You can zoom the image 3 times. You can use the ▲▼◀▶ buttons to move the enlarged picture. You can zoom the image rotated.
Close	Menu close.

Music File Playback

MP3/WAV file format is supported.

1. Press the ▲ or ▼ button to move to a desired file and it will automatically play.
2. The active page is displayed. Change the pages by pressing ◀ or ▶ button.
3. Press the EXIT button to move to the previous menu.
4. Press the INFO button to move to the WISELINK setup.
5. The elapsed time, total playback time, creation date and number (current file number / total file number) for the selected file will be displayed.
6. The selected memory card type is displayed.

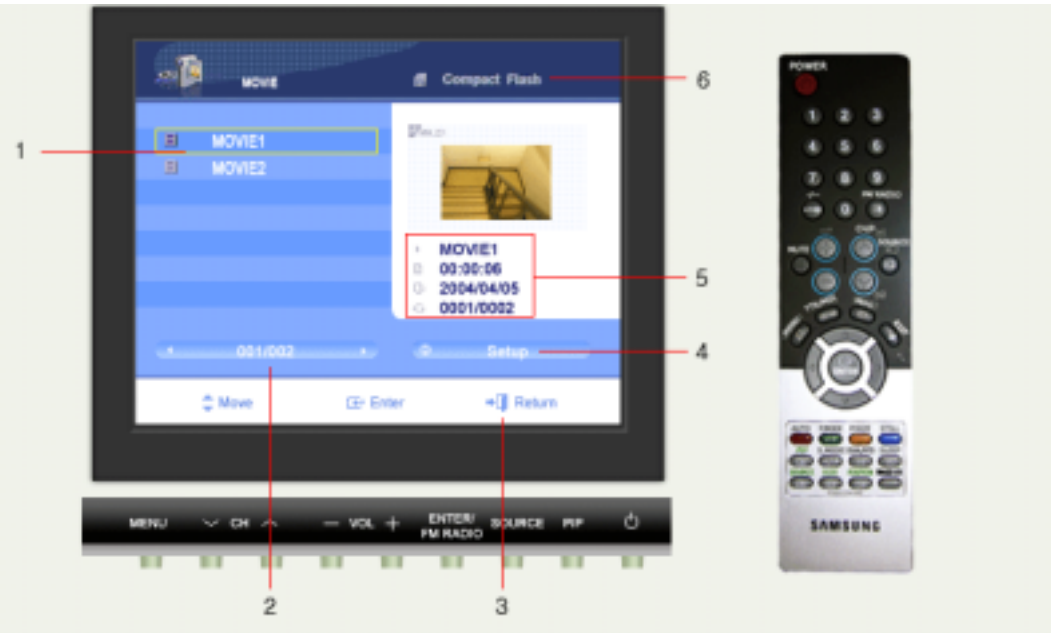
Press the ENTER button to play or stop the file.

- Play time and total running time of VBR MP3/WAV files will not be displayed.
- The screen saver will become active after a set period of time if the music is stopped.

◉ Play / Stop	

Movie File Playback

AVI/MOV file format is supported.



1. Press the ▲ or ▼ button to move to a desired file and it will automatically play.
2. The active page is displayed. Change the pages by pressing ◀ or ▶ button.
3. Press the EXIT button to move to the previous menu.
4. Press the INFO button to move to the WISELINK setup.
5. The title, total playback time, creation date and number (current file number / total file number) for the selected file will be displayed.
6. The selected memory card type is displayed.

- The screen saver will become active after a set period of time whether the movie is stoped or paused.
- If resolution is set below 1024 x 768 during reproduction of moving images, the screen of the images appears in reduced size.

○ Play ○ Rewind ◉ Fast ○ Stop	

ALL FILE Playback

JPEG/MP3/WAV/AVI/MOV files are displayed.

1. JPEG/MP3/WAV/AVI/MOV files.

2. The active page is displayed.
Change the pages by pressing ◀ or ▶ button.

3. Press the EXIT button to ruturn to the previous menu.

4. Press the INFO button to move to the WISELINK setup.

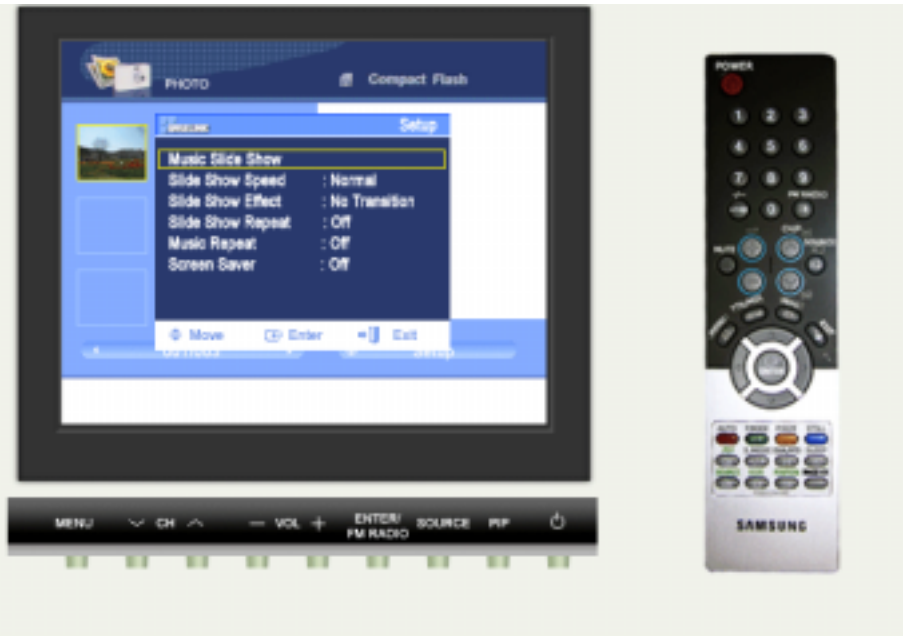
5. The information for the current file is displayed.

6. The selected memory card type is displayed.

◉ ALL FILE	

WISELINK Setup

You can set various functions in WISELINK mode.



- Turning off the Monitor set or switching to another mode during setup will cancel your settings.
- The Music Slide Show always repeats all the music. It doesn't follow the setting of Music Repeat.
- The ENTER button will stop the Music Slide Show and Bar setup menu is displayed.
- The INFO button will stop the Music Slide Show and setup menu is displayed.

◉ Music Slide Show ○ Photo Slide Speed ○ Photo Slide Effect ○ Slide Show Repeat ○ Music Repeat ○ Screen Saver	

Music Slide Show

- Music plays while the pictures are displayed in sequence.
- Music Slide Show does not work in either Card Selection mode or File Type Selection mode.
- If there are no JPEG files or MP3/WAV files in the folder, Music Slide Show will not run.
- During the Music Slide Show, only the ENTER, EXIT, INFO, and SOURCE buttons are available.

Photo Slide Speed

You can set the Time per Picture when the slide show starts.

- Fast: Pictures change every three seconds.
- Normal: Pictures change every five seconds.
- Slow: Pictures change every ten seconds.

Photo Slide Effect

During the slide show, you can select the Slide Show Effects to display using the remote control.

- You can select one out of "No Transition", "Wipe Down", "Blinds Horizontal", "Split Horizontal In", "Split Horizontal Out", "Checkerboard Down", "Random Bars Horizontal", "Dissolve", and "Random Transition".

Slide Show Repeat

You can set the Slide Show repeat.

- Off: Picture stops after playing the folder play in sequence.
- On: ALL FILE are played repeatedly.

Music Repeat

You can set the music repeat.

- Off: MP3/WAV files stop after playing the folder play in sequence.
- One: The selected file is played repeatedly.
- All: ALL FILE are played repeatedly.

Screen Saver	A screen saver is provided to prolog the life of the Screen. • Off: Stops the screen saver. • 5min: The screen saver automatically turns on if no button is pressed within five minutes. • 10min: The screen saver automatically turns on if no button is pressed within ten minutes.

If the Monitor seems to have a problem, first try this list of possible problems and solutions.
If none of these troubleshooting tips apply, then call your nearest service center.

Problem	Possible Solution
Image or Music Files do not play back.	• Please check the original files. There may be errors in the original files.
Each picture or slide has a different running time.	• The processing time may differ depending on the memory card type or the picture size.
The memory card is not recognized.	• Check if it is supported in WISELINK mode. Check if the card is inserted all the way. The reading time may differ depending on the card capacity and type. Please give it a moment. Check if the memory card is normal. A memory card which has been formatted on a computer may not work in AV devices.
The volume changes while music is played.	• Check the original file. The manufacturers may randomly set the volume when they create Music Files.
There is a blank screen when switching to WISELINK.	• Check if the inserted memory card is normal.
I ejected the card, but the current screen remains unchanged.	• The time that it takes for the device to recognize the ejection varies depending on the type and capacity of the card. Wait for a few seconds. The screen will return to the initial card selection screen. • Ejecting the card during playback may cause an error. Press the SOURCE button on the remote to go to a different source, and then come back to WISELINK. The initial card selection screen will appear.
The music breaks up.	• Check the music file on the memory card. It is possible that the music file stored in the memory card itself breaks up. • Normal playback is not possible if the card is defective or the music file's quality is bad.
All of the necessary files are in the "ALL FILE" folder, but the music slide show would not start.	• The music slide show plays folder by folder. Therefore, even if the "ALL FILE" folder contains all of the necessary photo and music files, the slide show does not play unless both the photo and music files needed for the slide show are contained in the same folder.
In the settings menu for "Music Slide Show," I switched the mode from Repeat Music All to Repeat Music One, but it keeps repeating all music files.	• The Repeat Music One feature is not available for "Music Slide Show."
How do I copy (save) photo (JPEG) and/or music (MP3, WAV) files to my computer from the memory card?	• Use the USB slot below the memory card slot to copy files to the computer from the memory card. The USB cable is included in the product package. • If your computer is not running Windows XP, you must

	install the driver from the CD, so that the computer recognizes the driver. Note that it will not recognize WISELINK.
The file names are distorted.	• WISELINK only supports file names in English. It does not support file names in other languages (Chinese, Japanese, etc.).

Self-Test Feature Check

Note Check the following items yourself before calling for service. Contact the service center for problems that you cannot solve by yourself.

Self-Test Feature Check | Not Supported Mode | Not Optimum Mode | Display Adapter Driver
Maintenance and Cleaning | Symptoms & Recommended Actions

1. Self-Test Feature Check

Your monitor provides a self test feature that allows you to check whether your monitor is functioning properly.

1. Turn off both your computer and the monitor.
2. Unplug the video cable from the back of the computer.
3. Turn on the monitor.

   The figure shown below ("Check Signal Cable") appears on a black background when the monitor is in its normal working condition though it does not sense any video signal: While in the Self-Test mode, the LED power indicator remains green and the figure moves around on the screen.

   Failure of any of the boxes to appear indicates a problem with your monitor. This box also appears during normal operation if the video cable becomes disconnected or damaged.

4. Turn off your monitor and reconnect the video cable; then turn on both your computer and the monitor.

If your monitor screen remains blank after using the previous procedure, check your video controller and computer system; **your monitor is functioning properly**.

2. Not Supported Mode

This indicates the display resolution or refresh rate is not properly set on your computer video card. Reboot the computer in Safe Mode and select "Default" in the "Refresh Rate Unknown" box while setting Adapter for Display Properties.

Note **Contact the computer dealer or manufacturer for information on Safe Mode Booting.**

Note Refer to Specifications > Preset Timing Modes for the resolutions or frequencies that are supported by the monitor.

Sometimes the screen turns black without the "Not Supported Mode" message appearing on the screen. This indicates the monitor is set for a frequency out of range or the PowerSaver mode is on.

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3. Not Optimum Mode

If the vertical resolution is set to 85Hz, you can still see the display but the warning message below appears and disappears after one minute. Since the monitor does not support a vertical resolution that is 85Hz higher, the monitor goes into "Not Supported Mode" and the screen becomes blank after one minute.
The user must adjust the frequency within that one minute.

If the resolution is set to UXGA (1600x1200 60Hz), the same warning message as above appears and disappears after one minute, but the display still works properly. (Down-Scaling)

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4. Display Adapter Driver

Note Display adapter refers to the computer video card driver.
If the adapter is not properly set, you cannot adjust resolution, frequency or color and you cannot install the monitor driver.

1. Checking Adapter Driver
   Click Start → Settings → Control Panel → Display → Settings → Advanced → Adapter.
   If "Default" or a wrong product model is indicated, it means that the adapter driver is not properly installed. Install the adapter driver again according to the information provided by the computer or video card manufacturers.

2. Installing Adapter Driver

   Note The instructions given below are for general circumstances.
   For specific issues, contact the relevant computer or video card manufacturers.

   1) Click Start → Settings → Control Panel → Display → Settings → Advanced → Adapter → Update Driver → Next → Display a list of the known drivers for this device so that I can choose a specific driver → Next → Have Disk (Insert Video Card Driver diskette) → OK → Next → Next → Finish.
   2) In case you have Adapter Driver Setup file on your computer:
      Run Setup.exe or Install.exe, which is found in the Adapter Driver Setup file.

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5. Maintenance and Cleaning

1. Maintaining the Monitor Case.
   Clean with a soft cloth after disconnecting the power cord.

- Do not use benzene, thinner or other flammable substances, or a wet cloth.
- We recommend a Samsung cleansing agent is used to prevent damage to the screen.

2. Maintaining the Flat Panel Display Screen.
   Clean with a soft cloth (cotton flannel) smoothly.

- Never use acetone, benzene or thinner.
  (They may cause flaws or deformation of the screen surface.)
- The user will be required to pay costs and related expenses for repair of damages caused by him/her.

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6. Symptoms and Recommended Actions

Note A monitor recreates visual signals received from the computer. Therefore, if there is trouble with the computer or the video card, this can cause the monitor to become blank, have poor coloring, noise, Video mode not supported, etc. In this case, first check the source of the problem, and then contact a service center or your dealer.

1. Check if the power cord and the video cables are properly connected to the computer.
2. Check if the computer beeps more than 3 times when booting.
   (If it does, request an after-service for the main board of the computer.)
3. If you installed a new video card or if you assembled the PC, check if you installed the adapter(video) driver and the monitor driver.
4. Check if the scanning ratio of the video screen is set at 75Hz or 85Hz.
   (Do not exceed 60Hz when using the maximum resolution.)
5. If you have problems in installing the adapter (video) driver, boot the computer in Safe Mode, remove the Display Adapter at the "**Control Panel**, **System**, **Device Administrator**" and then reboot the computer to reinstall the adapter (video) driver.

Note The following table lists possible problems and their solutions. Before calling for service, check the information in this section to see if you can remedy any problems yourself. If you do need assistance, please call, the phone number on the Information section or contact your dealer.

Installation | Screen | Audio | Remote Control

---

1. Problems related to Installation

Note Problems related to the monitor installation and their solutions are listed.

	Problems	Solutions
PC Mode	**It appears the PC does not function normally.**	• Check if the Display Adapter Driver (VGA Driver) is properly installed. (Refer to Installing Driver)
	The monitor screen flickers.	• Check if the signal cable between the computer and the monitor is securely connected and tightened. (Refer to Connecting to a Computer)
TV Mode	**TV screen is blurred or shows noise signals.**	• Check if the TV antenna connector is securely connected to the external antenna. (Refer to Connecting to TV)
	TV signal is not received	• Check "Channel system" and make sure you choose the correct channel system. (Refer to the Channel System) • Select "Auto program" to configure the channel system automatically. (Refer to the Auto Program)

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2. Problems related to Screen

Note Problems related to the monitor screen and their solutions are listed.

Problems	Solutions
Screen is blank and power indicator is off	• Ensure that the power cord is firmly connected and the LCD monitor is on.

	(Refer to the Connecting the Monitor)
"Check Signal Cable" message	• Ensure that the signal cable is firmly connected to the PC or video sources. (Refer to the Connecting the Monitor) • Ensure that the PC or video sources are turned on.
"Not Supported Mode" message	• Check the maximum resolution and the frequency of the video adaptor. • Compare these values with the data in the Preset Timing Modes Chart.
Picture rolls vertically.	• Check if the signal cable is securely connected. Connect it again securely. (Refer to Connecting to a Computer)
Image is not clear. Picture is blurred.	• Run Frequency Coarse and Fine tuning. • Turn on again after removing all accessories (video extension cable, etc.) • Set resolution and frequency to the recommended ranges.
Picture image is unstable and vibrates.	• Check if the resolution and frequency set for the computer video card falls in the range supported by the monitor. If not, reset them referring to the current Information under the monitor menu and Preset Timing Modes.
Ghost images are shown in the picture.	
The image is too light or too dark	• Adjust the Brightness and Contrast. (Refer to the Brightness, Contrast)
Screen color is inconsistent.	• Adjust color using Custom under OSD Color Adjustment menu.
Color image is distorted with dark shadows.	
White color is poor.	
Power Indicator blinks green.	• The monitor is currently saving the changes made in settings to the OSD memory.
Screen is blank and power indicator light is steady green or blinks every 0.5 or 1 seconds	• The monitor is using its power management system. • Press a key on the keyboard
The screen is blank and is blinking.	• If you see the "TEST GOOD" message on the screen when you press the MENU button, check the cable connection between the monitor and the computer to ensure that the connector is properly connected.

3. Problems related to Audio

Problems related to audio signals and their solutions are listed below.

Problems	Solutions
No sound	• Ensure that the audio cable is firmly connected to both the audio-in port on your monitor and the audio-out port on your sound card. (Refer to the Connecting the Monitor) • Check the volume level. (Refer to the Volume)
Sound level is too low.	• Check the volume level. (Refer to the Volume) • If the volume is still too low after turning the control to its maximum, check the volume control on the computer sound card or software program.
Sound is too high pitched or too low pitched	• Adjust the Treble and Bass to appropriate level.

4. Problems related to Remote Control

Note Problems related to the remote control and their solutions are listed.

Problems	Items to check
The remote control buttons do not respond.	• Check the battery polarities (+/-). • Check if the batteries have been exhausted. • Check if the power is on. • Check if the power cord is securely connected. • Check if a special fluorescent or neon lamp is on in the vicinity.

Q & A

Question	Answer
How can I change the frequency?	• Frequency can be changed by reconfiguring the video card. • Note that video card support can vary, depending on the version of the driver used. (Refer to the computer or the video card manual for details.)
How can I adjust the resolution?	• Windows ME/XP/2000 : Set the resolution at the Control Panel→Display→Settings. • Contact the video card manufacturer for details.
How can I set the Power Saving function?	• Windows ME/XP/2000 : Set the function at BIOS-SETUP of the computer or the screen saver. (Refer to Windows/Computer Manual).
How can I clean the outer case/LCD Panel?	• Disconnect the power cord and then clean the monitor with a soft cloth, using either a cleaning solution or plain water. • Do not leave any remains of the detergent nor scratch the case. Do not allow any water to go inside the monitor.

General

General	
Model Name	SyncMaster 730MP
LCD Panel	
Size	17" Diagonal
Display area	337.920(H) x 270.336(V)
Pixel Pitch	0.264(H) x 0.264(V)
Type	a-si TFT active matrix
Synchronization	
Horizontal	31 ~ 81kHz
Vertical	56 ~ 85Hz
Display Color	
16,194,277 Colors	
Resolution	
Maximum resolution	SXGA 1280 x 1024 @75Hz
Input Signal, Terminated	
RGB Analog , DVI Compliant Digital RGB. Composite H/V Sync, 0.7Vp-p Positive at 75 ohms Separate H/V sync, TTL level positive or negative	
TV / Video	
Color system	NTSC-M, PAL-M/N, PAL/SECAM - L/L',B/G,D/K,I
Video format	CVBS, S-Video, Component, SCART(RGB), RF
Maximum Pixel Clock	
140 MHz	
Power Supply	
AC 90 ~ 264 VAC(+/- 10%) , 60/50 Hz ± 3Hz	
Signal Cable	
15pin-to-15pin D-sub cable, detachable DVI-D to DVI-D connector, detachable (Option)	

Power Consumption

Less than 55W

Power Saving

Less than 2W

Dimensions (WxDxH)/ Weight

496 x 62.6 x 336 mm (Without stand)
496 x 170 x 378 mm / 5.7 kg (With Stand)

VESA Mounting Interface

75mm x 75mm (for use with Specialty(Arm) Mounting hardware.)

Environmental considerations

Operating	Temperature: 50°F ~ 104°F(10°C ~ 40°C) Humidity: 10% ~ 80%, non-condensing
Storage	Temperature: -4°F ~113°F (-20°C ~ 45°C) Humidity: 5% ~ 95%, non-condensing

Plug and Play Capability

This monitor can be installed on any Plug & Play compatible system. Interaction of the monitor and computer systems will provide the best operating conditions and monitor settings. In most cases, monitor installation will proceed automatically, unless the user wishes to select alternate settings.

Dot Acceptable

TFT LCD panel manufactured by using advanced semiconductor technology with precision of 1ppm(one millionth) above is used for this product. But the pixels of RED, GREEN, BLUE and WHITE color seem to be bright sometimes or some of black pixels could be seen. This is not from bad quality and you can use it without uneasiness.

- For example, the number of TFT LCD sub pixels that is contained in this product are 3,932,160.

Note: Design and specifications are subject to change without prior notice.

PowerSaver

This monitor has a built-in power management system called PowerSaver. This system saves energy by switching your monitor into a low-power mode when it has not been used for a certain amount of time. The monitor automatically returns to normal operation when you press a key on the keyboard. For energy conservation, turn your monitor OFF when it is not needed, or when leaving it unattended for long periods. The PowerSaver system operates with a VESA DPMS compliant video card installed in your computer. Use a software utility installed on your computer to set up this feature.

State	Normal Operation	Power saving mode EPA/ENERGY 2000	Power off (Power button)
Power Indicator	Green	Green, Blinking	Black
Power Consumption	Less than 55W	Less than 2W (Off-mode)	Less than 1W (110Vac)

This monitor is EPA ENERGY STAR® compliant and ENERGY2000 compliant when used with a computer equipped with VESA DPMS functionality.
As an ENERGY STAR® Partner, SAMSUNG has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.

Preset Timing Modes

If the signal transferred from the computer is the same as the following Preset Timing Modes, the screen will be adjusted automatically. However, if the signal differs, the screen may go blank while the power LED is on. Refer to the video card manual and adjust the screen as follows.

Table 1. Preset Timing Modes

Display Mode	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (H/V)
MAC, 640 x 480	35.000	66.667	30.240	-/-
MAC, 832 x 624	49.726	74.551	57.284	-/-
MAC,1152 x870	68.681	75.062	100.000	-/-
IBM, 640 x 350	31.469	70.086	25.175	+/-
IBM, 640 x 480	31.469	59.940	25.175	-/-
IBM, 720 x 400	31.469	70.087	28.322	-/+
VESA, 640 x 480	37.500	75.000	31.500	-/-
VESA, 640 x 480	37.861	72.809	31.500	-/-
VESA, 640 x 480	43.269	85.008	36.000	-/-
VESA, 800 x 600	35.156	56.250	36.000	+,-/+,-
VESA, 800 x 600	37.879	60.317	40.000	+/+
VESA, 800 x 600	48.077	72.188	50.000	+/+
VESA, 800 x 600	46.875	75.000	49.500	+/+
VESA, 800 x 600	53.674	85.061	56.250	+/+
VESA, 1024 x 768	48.363	60.004	65.000	-/-
VESA, 1024 x 768	56.476	70.069	75.000	-/-
VESA, 1024 x 768	60.023	75.029	78.750	+/+
VESA, 1024 x 768	68.677	84.977	94.500	+/+
VESA, 1152 x 864	67.500	75.000	108.000	+/+
VESA, 1280 x 1024	63.981	60.020	108.00	+/+
VESA, 1280 x 1024	79.976	75.025	135.00	+/+

Table 2. Broadcasting Systems
Note : According to broadcasting type in each country, you may not be able to select one.

Broadcasting Systems	NTSC				
	NTSC -M				
Countries	USA South Korea Japan Ecuador Mexico Guatemala Canada				
Broadcasting Systems	PAL				
	PAL-B/G	PAL-D/K	PAL-I	PAL-N	PAL-M
	Italy Sweden				

Countries	Germany Norway Spain Israel Denmark Portugal Netherlands Austria Singapore Indonesia Australia	China North Korea Rumania	Ireland England South Africa Hongkong	Argentina Uruguay Paraguay	Brazil

Broadcasting Systems	**SECAM**			
	SECAM-B	SECAM-D	SECAM-K_1	SECAM-L
Countries	Iran Iraq Saudi arabia Syria Lebanon Egypt		Russia Hungary Bulgaria Poland	France

Horizontal Frequency

The time to scan one line connecting the right edge to the left edge of the screen horizontally is called Horizontal Cycle and the inverse number of the Horizontal Cycle is called Horizontal Frequency. Unit: kHz

Vertical Frequency

Like a fluorescent lamp, the screen has to repeat the same image many times per second to display an image to the user. The frequency of this repetition is called Vertical Frequency or Refresh Rate. Unit: Hz

Service

AUSTRALIA :
Samsung Electronics Australia Pty Ltd.
Customer Response Centre
7 Parkview Drive, Homebush Bay NSW 2127
Tel : 1300 362 603
http://www.samsung.com.au/

BRAZIL :
Samsung Eletronica da Amazonia Ltda.
R. Prof. Manoelito de Ornellas, 303, Terro B
Chacara Sto. Antonio, CEP : 04719-040
Sao Paulo, SP
SAC : 0800 124 421
http://www.samsung.com.br/

CANADA :
Samsung Electronics Canada Inc.
Samsung Customer Care
7037 Financial Drive
Mississauga, Ontario
L5N 6R3
1-800-SAMSUNG (1-800-726-7864)
http://www.samsung.ca/

CHILE :
SONDA S.A.
Teatinos 550, Santiago Centro, Santiago, Chile
Fono: 56-2-5605000 Fax: 56-2-5605353
56-2-800200211
http://www.sonda.com/
http://www.samsung.cl/

COLOMBIA :
Samsung Electronics Colombia
Cra 9 No 99A-02 Of. 106
Bogota, Colombia
Tel.: 9-800-112-112
Fax: (571) 618 - 2068
http://www.samsung-latin.com/
e-mail : soporte@samsung-latin.com

ESPAÑA :
Samsung Electronics Comercial Iberica, S.A.
Ciencies, 55-65 (Poligono Pedrosa) 08908
Hospitalet de Llobregat (Barcelona)
Tel. : (93) 261 67 00
Fax. : (93) 261 67 50

http://samsung.es/

- **FRANCE :**
  SAMSUNG ELECTRONICS FRANCE Service
  Paris Nord 2
  66 rue des Vanesses
  BP 50116 Villepinte
  95950 Roissy CDG Cedex
  Tel : 08 25 08 65 65
  Fax : 01 48 63 06 38
  http://www.samsungservices.com/

- **GERMANY :**
  TELEPLAN Rhein-Main GmbH
  Feldstr. 16
  64331 Weiterstadt
  T. 06151/957-1306
  F. 06151/957-1732
  * EURO 0.12/Min
  http://www.samsung.de/

- **HUNGARY :**
  Samsung Electronics Magyar Rt.
  1039, Budapest, Lehel u. 15-17.
  Tel: 36 1 453 1100
  Fax: 36 1 453 1101
  http://www.samsung.hu/

- **ITALY :**
  Samsung Electronics Italia S.p.a.
  Via C. Donat Cattin, 5
  20063 Cernusco s/Naviglio (MI)
  Servizio Clienti: 199.153.153
  http://www.samsung-italia.com/

- **MEXICO :**
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  Tel : 800-3278(FAST)
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  http://www.samsung.co.za/

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  SILOM ROAD ,SILOM,BANGRAK
  BANGKOK 10500
  TEL : 0-2635-2567
  FAX : 0-2635-2556

- **UKRAINE :**
  SAMSUNG ELECTRONICS REPRESENTATIVE OFFICE IN UKRAINE
  4 Glybochitska str.
  Kiev, Ukraine
  Tel. 8-044-4906878
  Fax 8-044-4906887
  Toll-free 8-800-502-0000
  http://www.samsung.com.ua/

- **United Kingdom :**
  Samsung Electronics (UK) Ltd.
  Samsung House, 225 Hook Rise South
  Surbiton, Surrey KT6 7LD
  Tel. : (0208) 391 0168
  Fax. : (0208) 397 9949
  < European Service Center & National Service >
  Stafford Park 12 Telford, Shropshire, TF3 3BJ
  Tel. : (0870) 242 0303
  Fax. : (01952) 292 033
  http://samsungservice.co.uk/

- **U.S.A. :**
  Samsung Electronics America
  Service Division
  400 Valley Road, Suite 201
  Mount Arlington, NJ 07856
  1-800-SAMSUNG (1-800-726-7864)
  http://samsungusa.com/monitor/

Terms

Sync Signal

Sync (Synchronized) Signals refer to the standard signals that are required to display desired colors on the monitor. They are divided into Vertical and Horizontal Sync Signals. These signals display normal color images by the set resolution and frequency.

Types of Sync Signals

Separate	This is a scheme of transmitting individual vertical sync signals to the monitor.
Composite	This is a scheme of combining vertical sync signals into one composite signal and transmitting it to the monitor. The monitor displays the color signals by separating the composite signal into original color signals.
Sync On Green	This scheme does not use sync signals. Instead, it combines horizontal and vertical sync signals into a Green signal and transmits to the monitor. It is mainly used for workstations.

Dot Pitch

The image on a monitor is composed of red, green and blue dots. The closer the dots, the higher the resolution. The distance between two dots of the same color is called the 'Dot Pitch'. Unit: mm

Vertical Frequency

The screen must be redrawn several times per second in order to create and display an image for the user. The frequency of this repetition per second is called Vertical Frequency or Refresh Rate. Unit: Hz

Example: If the same light repeats itself 60 times per second, this is regarded as 60 Hz.

Horizontal Frequency

The time to scan one line connecting the right edge to the left edge of the screen horizontally is called Horizontal Cycle. The inverse number of the Horizontal Cycle is called Horizontal Frequency. Unit: kHz

Interlace and Non-Interlace Methods

Showing the horizontal lines of the screen from the top to the bottom in order is called the Non-Interlace method while showing odd lines and then even lines in turn is called the Interlace method. The Non-Interlace method is used for the majority of monitors to ensure a clear image. The Interlace method is the same as that used in TVs.

Plug & Play

This is a function that provides the best quality screen for the user by allowing the computer and the monitor to exchange information automatically. This monitor follows the international standard VESA DDC for the Plug & Play function.

Resolution

The number of horizontal and vertical dots used to compose the screen image is called 'resolution'. This number shows the accuracy of the display. High resolution is good for performing multiple tasks as more image information can be shown on the screen.

Example: If the resolution is 1280 x 1024 , this means the screen is composed of 1280 horizontal dots (horizontal resolution) and 1024 vertical lines (vertical resolution).

A2

This system uses two carriers to transmit voice data. Countries such as South Korea and Germany use this system.

BTSC

Broadcast Television System Committee
The stereo broadcasting system that is used in most of the countries that have adopted the NTSC system, including the United States, Canada, Chile, Venezuela and Taiwan. It also refers to the organization that has been organized to promote its development and management.

EIAJ

Electronic Industries Association of Japan.

RF Cable

A round signal cable generally used for TV antennas.

Satellite Broadcasting

Broadcasting service provided via satellite. Enables high picture quality and clear sound throughout the country regardless of the location of the viewer.

Sound Balance
Balances the levels of the sound coming from each speaker in televisions with two speakers.

Cable TV
Whereas the terrestrial broadcasting is delivered via frequency signals through the air, cable broadcasting is transmitted via a cable network. In order to view cable TV, one must purchase a cable receiver and hook it up to the cable network.

CATV
"CATV" refers to the broadcasting service offered at hotels, schools and other buildings through their own broadcasting system, apart from VHF or UHF broadcasting by terrestrial broadcasters. The CATV programs may include movies, entertainment and educational programs. (Different from cable TV.)

CATV can be viewed only within the area in which the CATV service is offered.

S-Video
Short for "Super Video." S-Video allows up to 800 lines of horizontal resolution, enabling high-quality video.

VHF/UHF
VHF indicates TV channels 2 to 13, and UHF indicates channels 14 through 69.

Channel Fine Tuning
This feature allows the viewer to fine-tune the TV channel to obtain the best viewing conditions. The Samsung LCD TV has both automatic and manual channel fine-tuning features to enable the viewer to adjust their desired settings.

External Device Input
External device input refers to video input from such external video devices as VCRs, camcorders and DVD players, separate from a TV broadcast.

For Better Display

1. Adjust computer resolution and screen injection rate (refresh rate) on computer as described below to enjoy the best quality of picture. You can have an uneven quality of picture in the screen if the best quality of picture is not provided in TFT-LCD.
   - Resolution: 1280 x 1024
   - Vertical frequency (refresh rate): 60 Hz
2. TFT LCD panel manufactured by using advanced semiconductor technology with precision of 1ppm (one millionth) above is used for this product. But the pixels of RED, GREEN, BLUE and WHITE color seem to be bright sometimes or some of black pixels could be seen.
   This is not from bad quality and you can use it without uneasiness.
   - For example, the number of TFT LCD sub pixels that is contained in this product are 3,932,160.
3. When you clean the monitor and the panel outside, please apply the recommended small amount of cleaner by using soft and dry cloth and polish it. Let LCD area not to be forced but to be scrubbed out softly.
   If excessive force is applied, you can have a stain on it.
4. If you are not satisfied with the quality of picture, you can get better quality of picture by executing "auto adjustment function" in display screen that is appeared as window termination button is pressed.
   If there's still noise after automatic adjustment, use FINE/COARSE adjustment function.
5. If you view a fixed screen for an extended period of time, residual image or blurriness may appear. Change the mode to energy save or set a screensaver to moving picture when you need to be away from the monitor for an extended period of time.

Authority

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BBE High Definition Sound is the core sound enhancement technology licensed by BBE Sound and featured in the BBE Sonic Maximizer range of professional audio signal processors.

FCC Information | IC Compliance Notice | MPR II Compliance
European Notice (Europe only) | PCT Notice | VCCI |
TCO'95-Ecological requirements for personal computers (TCO'95 applied model only)
TCO'99-Ecological requirements for personal computers (TCO'99 applied model only)
TCO'03-Ecological requirements for personal computers (TCO'03 applied model only)
TCO'03 Recycling Information (TCO'03 applied model only)
Medical Requirement
Mercury Statement (LCD Monitor, LCD TV, DLP Projection TV, Projector for USA only)

FCC Information

User Instructions
The Federal Communications Commission Radio Frequency Interference Statement includes the following warning:

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television receptions, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

User Information
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. If necessary, consult your dealer or an experienced radio/television technician for additional suggestions. You may find the booklet called How to Identify and Resolve Radio/TV Interference Problems helpful. This booklet was prepared by the Federal Communications Commission. It is available from the U.S. Government Printing Office, Washington, DC 20402, Stock Number 004-000-00345-4.

The party responsible for product compliance:
SAMSUNG ELECTRONICS CO., LTD
America QA Lab of Samsung
3351 Michelson Drive,
Suite #290, Irvine, CA92612 USA
Tel) 949-975-7310
Fax) 949-922-8301

Warning
User must use shielded signal interface cables to maintain FCC compliance for the product.

Provided with this monitor is a detachable power supply cord with IEC320 style terminations. It may be suitable for connection to any UL Listed personal computer with similar configuration. Before making the connection, make sure the voltage rating of the computer convenience outlet is the same as the monitor and that the ampere rating of the computer convenience outlet is equal to or exceeds the monitor voltage rating.
For 120 Volt applications, use only UL Listed detachable power cord with NEMA configuration 5-15P type (parallel blades) plug cap. For 240 Volt applications use only UL Listed Detachable power supply cord with NEMA configuration 6-15P type (tandem blades) plug cap.

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IC Compliance Notice

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations of ICES-003.

Cet appareil Numérique de classe B respecte toutes les exigences du Règlemont NMB-03 sur les équipements produisant des interférences au Canada.

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MPR II Compliance

This monitor complies with SWEDAC(MPR II) recommendations for reduced electric and magnetic fields.

European Notice(Europe Only)

Products with the CE marking comply with the EMC Directive(89/336/EEC), (92/31/EEC), (93/68/EEC) and the Low Voltage Directive (73/23/EEC) issued by the Commission of the European Community. Compliance with these directives implies conformity to the following European Norms:

- EN55022:1998+A1:2000 - Radio Frequency Interference
- EN55024:1998 - Electromagnetic Immunity
- EN61000-3-2:1995+A1/A2:1998 - Power Line Harmonics
- EN61000-3-3:1995 - Voltage Fluctuations

PCT Notice

АЯ46

VCCI

This is a Class B product based on the standard of the Voluntary Control Council for Interference by Information Technology Equipment (VCCI). If this is used near a radio or television receiver in a domestic environment, it may cause radio interference. Install and use the equipment according to the instruction manual.

TCO'95-Ecological requirements for personal computers (TCO'95 applied model only)

AB general requirements
AB2 Written Eco-document acompanying the products
Congratulations! You have just purchased a TCO'95 approved and labelled product! Your choice has provided you with a product developed for professional use. Your purchase has also contributed to reducing the burden on the environment and to the further development of environmentally-adapted electronic products.

Why do we have environmentally-labelled monitors?
In many countries, environmental labelling has become an established method for encouraging the adaptation of goods and services to the environment.The main problem as far as monitors and other electronic equipment are concerned is that environmentally harmful substances are used both in the products and during their manufacture. Since it has not been possible so far for the majority of electronic equipment to be recycled in a satisfactory way, most of these potentially damaging substances sooner or later enter Nature.

There are also other characteristics of a monitor, such as energy consumption levels, that are important from both the working and natural environment viewpoints. Since all types of conventional electricity generation have a negative effect on the environment (acidic and climate-influencing emissions, radioactive waste, etc.) it is vital to conserve energy. Electronic equipment in offices consumes an enormous amount of energy, since it is often routinely left running continuously.

What does labelling involve?
This product meets the requirements for the TCO'95 scheme, which provides for international environmental labelling of monitors. The labelling scheme was developed as a joint effort by the TCO (The Swedish Confederation of Professional Employees), Naturskyddsforeningen (The Swedish Society for Nature Conservation) and NUTEK (The National Board for Industrial and Technical Development in Sweden).

The requirements cover a wide range of issues: environment, ergonomics, usability, emission of electrical and magnetic fields, energy consumption and electrical and fire safety.

The environmental demands concern among other things restrictions on the presence and use of heavy metals, brominated and chlorinated flame retardants, CFCs (freons), and chlorinated solvents. The product must be prepared for recycling and the manufacturer is obliged to have an environmental plan, which must be adhered to in each country where the company conducts its operations policy. The energy requirements include a demand that the monitor after a certain period of inactivity shall reduce its power consumption to a lower level, in one or more stages. The length of time to reactivate the monitor shall be reasonable for the user.

Labelled products must meet strict environmental demands, for example in respect of the reduction of electric and magnetic fields, along with physical and visual ergonomics and good usability.

TCO Development Unit 1996-11-29
On the page this folder you will find a brief summary of the environmental requirements met by this product.
The complere environmental criteria document may be ordered from:
TCO Development Unit
S-11494 Stockholm
Sweden
Fax: +46 8 782 92 07
E-mail (Internet): development@tco.se
Current information regarding TCO'95-approved and labelled products may also be obtained via the Internet, using the address:
http://www.tco-info.com/
TCO'95 is a co-operative project between(3 logos)

Environmental Requirements
Brominated flame retardants are present in printed circuit boards, cables, wires, casings and housings. In turn, they delay the spread of fire. Up to thirty percent of the plastic in a computer casing can consist of flame retardant substances. These are related to another group of environmental toxins, PCBs, which are suspected to give rise to similar harm, including reproductive damage in fish eating birds and mammals, due to the bioaccumulative processes. Flame retardants have been found in human blood and researchers fear that disturbances in foetus development may occur.
- TCO'95 demand requires that plastic components weighing more than 25 grams must not contain organically bound chlorine and bromine.

Lead
Lead can be found in picture tubes, display screens, solders and capacitors. Lead damages the nervous system and in higher doses, causes lead poisoning.

- TCO'95 requirement Permits the inclusion of lead since no replacement has yet been developed.

Cadmium
Cadmium is present in rechargeable batteries and in the colour generating layers of certain computer displays. Cadmium damages the nervous system and is toxic in high doses.

- TCO'95 requirement states that batteries may not contain more than 25 ppm (parts per million) of cadmium. The colour-generating layers of display screens must not contain any cadmium.

Mercury
Mercury is sometimes found in batteries, relays and switches. Mercury damages the nervous system and is toxic in high doses.

- TCO'95 requirement states that batteries may not contain more than 25 ppm (parts per million) of mercury. It also demands that no mercury is present in any of the electrical or

electronics components concerned with the display unit.

CFCs (freons)
CFCs (freons) are sometimes used for washing printed circuit boards and in the manufacturing of expanded foam for packaging. CFCs break down ozone and thereby damage the ozone layer in the stratosphere, causing increased reception on Earth of ultraviolet light with consequent increased risks of skin cancer (malignant melanoma).

- The relevant TCO'95 requirement: Neither CFCs nor HCFCs may be used during the manufacturing of the product or its packaging.

TCO'99-Ecological requirements for personal computers (TCO'99 applied model only)

Congratulations!
You have just purchased a TCO'99 approved and labelled product! Your choice has provided you with a product developed for professional use. Your purchase has also contributed to reducing the burden on the environment and also to the further development of environmentally adapted electronics products.

This product meets the requirements for the TCO'99 scheme which provides for an international environmental and quality labelling labelling of personal computers. The labelling scheme was developed as a joint effort by the TCO(The Swedish Confederation of Professional Employees), Svenska Naturskyddsforeningen(The Swedish Society for Nature Conservation), Statens Energimyndighet(The Swedish National Energy Administration) and SEMKO AB.

The requirements cover a wide range of issuse: environment, ergonomics, usability, reduction of electric and magnetic fields, energy consumption and electrical safety.

Why do we have environmentally labelled computers?
In many countries, environmental labelling has become an established method for encouraging the adaptation of goods and services to the environment. The main problem, as far as computers and other electronics equipment are concerned, is that environmentally harmful substances are used both in the products and during their manufacture. Since it is not so far possible to satisfactorily recycle the majority of electronics equipment, most of these potentially damaging substances sooner or later enter nature.

There are also other characteristics of a computer, such as energy consumption levels, that are important from the viewpoints of both the work (internal) and natural (external) environments. Since all methods of electricity generation have a negative effect on the environment (e.g. acidic and climate-influencing emissions, radioactive waste), it is vital to save energy. Electronics equipment in offices is often left running continuously and thereby consumes a lot of energy.

What does labelling involve?
The environmental demands has been developed by Svenska Naturskyddsforeningen (The Swedish Society for Nature Conservation). These demands impose restrictions on the presence and use of heavy metals, brominated and chlorinated flame retardants, CFCs(freons) and chlorinated solvents, among other things. The product must be prepared for recycling and the manufacturer is obliged to have an environmental policy which must be adhered to in each country where the company implements its operational policy.

The energy requirements include a demand that the computer and/or display, after a certain period of inactivity, shall reduce its power consumption to a lower level in one or more stages. The length of time to reactivate the computer shall be reasonable for the user.

Below you will find a brief summary of the environmental requirements met by this product. The complete environmental criteria document may be ordered from:

TCO Development
SE-114 94 Stockholm, Sweden
Fax: +46 8 782 92 07
Email (Internet): development@tco.se

Current information regarding TCO'99 approved and labelled products may also be obtained

via the Internet, using the address: http://www.tco-info.com/

Environmental requirements
Flame retardants
Flame retardants are present in printed circuit boards, cables, wires, casings and housings. Their purpose is to prevent, or at least to delay the spread of fire. Up to 30% of the plastic in a computer casing can consist of flame retardant substances. Most flame retardants contain bromine or chloride, and those flame retardants are chemically related to another group of environmental toxins, PCBs. Both the flame retardants containing bromine or chloride and the PCBs are suspected of giving rise to severe health effects, including reproductive damage in fish-eating birds and mammals, due to the bio-accumulative* processes. Flame retardants have been found in human blood and researchers fear that disturbances in foetus development may occur.

The relevant TCO'99 demand requires that plastic components weighing more than 25 grams must not contain flame retardants with organically bound bromine or chlorine. Flame retardants are allowed in the printed circuit boards since no substitutes are available.

Cadmium**
Cadmium is present in rechargeable batteries and in the colour-generating layers of certain computer displays. Cadmium damages the nervous system and is toxic in high doses. The relevant TCO'99 requirement states that batteries, the colour-generating layers of display screens and the electrical or electronics components must not contain any cadmium.

Mercury**
Mercury is sometimes found in batteries, relays and switches. It damages the nervous system and is toxic in high doses. The relevant TCO'99 requirement states that batteries may not contain any mercury. It also demands that mercury is not present in any of the electrical or electronics components associated with the labelled unit. There is however one exception. Mercury is, for the time being, permitted in the back light system of flat panel monitors as today there is no commercially available alternative. TCO aims on removing this exception when a Mercury free alternative is available.

CFCs (freons)
The relevant TCO'99 requirement states that neither CFCs nor HCFCs may be used during the manufacture and assembly of the product. CFCs (freons) are sometimes used for washing printed circuit boards. CFCs break down ozone and thereby damage the ozone layer in the stratosphere, causing increased reception on earth of ultraviolet light with e.g. increased risks of skin cancer (malignant melanoma) as a consequence.

Lead**
Lead can be found in picture tubes, display screens, solders and capacitors. Lead damages the nervous system and in higher doses, causes lead poisoning. The relevant TCO'99 requirement permits the inclusion of lead since no replacement has yet been developed.

TCO'03-Ecological requirements for personal computers (TCO'03 applied model only)

Congratulations!
The display you have just purchased carries the TCO'03 Displays label. This means that your display is designed, manufactured and tested according to some of the strictest quality and environmental requirements in the world. This makes for a high performance product, designed with the user in focus that also minimizes the impact on our natural environment.

Some of the features of the TCO'03 Display requirements:

Ergonomics
Good visual ergonomics and image quality in order to improve the working environment for the user and to reduce sight and strain problems. Important parameters are luminance, contrast, resolution, reflectance, colour rendition and image stability.

Energy
- Energy-saving mode after a certain time ?beneficial both for the user and the environment
- Electrical safety

Emissions

- Electromagnetic fields
- Noise emissions

Ecology

- The product must be prepared for recycling and the manufacturer must have a certified environmental management system such as EMAS or ISO 14 000
- Restrictions on
  o chlorinated and brominated flame retardants and polymers
  o heavy metals such as cadmium, mercury and lead.

The requirements included in this label have been developed by TCO Development in cooperation with scientists, experts, users as well as manufacturers all over the world. Since the end of the 1980s TCO has been involved in influencing the development of IT equipment in a more user-friendly direction. Our labelling system started with displays in 1992 and is now requested by users and IT-manufacturers all over the world.

For more information, Please visit
www.tcodevelopment.com

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TCO'03 Recycling Information (TCO'03 applied model only)

For recycling information for TCO'03 certified monitors, for the residents in the following countries, please contact the company corresponding to your region of residence. For those who reside in other countries, please contact a nearest local Samsung dealer for recycling information for the products to be treated in environmentally acceptable way.

	[U.S.A. Residents Only]	[European Residents Only]		
	U.S.A.	SWEDEN	NORWAY	GERMANY
COMPANY	Solid Waste Transfer & Recycling Inc	ELKRETSEN	Elektronikkretur AS	vfw AG
ADDRESS	442 Frelinghuysen Ave Newark, NJ 07114	ELKRETSEN Box 1357, 111 83 Stockholm Barnhusgatan 3, 4 tr.	6454 Etterstad 0602 Oslo Fyrstikkalln 3B	Max Plank Strasse 42 50858 Collogne Germany
TELEPHONE	973-565-0181	08-545 212 90	23 06 07 40	49 0 2234 9587 - 0
FAX	Fax: 973-565-9485	08-545 212 99	23 06 07 41	
E-MAIL	none	info@el-kretsen.se	adm@elektronikkretur.no	vfw.info@vfw-ag.de
HOME PAGE	http://www.bcua.org/Solid Waste_Disposal.htm	http://www.el-kretsen.se/	http://www.elretur.no/	

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Medical Requirement

Classifications:
In accordance with UL 2601-1/IEC 60601-1, the product is cssified as Continuous duty Class I equipment, which is not protected against ingress of liquids. The product is not suitable for use in the presence of a flammable anaesthetic mixture with air or with oxygen or nitrous oxide.

EMC

This equipment has been tested and found to comply with the limits for medical devices to the IEC 601-1-2:1994. These limits are designed to provide reasonable protection against harmful interference in a typical medical installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to other devices in the vicinity. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to other devices, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving device.
- Increase the separation between the equipment.
- Connect the equipment into an outlet on a circuit different from that to which the other device(s) are connected.
- Consult the manufacturer or field service technician for help.

Video In / RS 232 / Video Out
Accessories equipment connected to the analog and digital interfaces must be certified to the respective IEC standards (i.e. IEC 950 for data processing equipment and IEC 601-1 for medical equipment.) Furthermore all configurations shall comply with the system standard IEC 601-1-1. Everybody who connects additional equipment to the signal input part or signal output part configures a medical system, and is therefore, responsible that the system complies with the requirements of the system standard IEC 601-1-1. If in doubt, consult the technical services department or your local representative.

Transport and Storage Limitations:
Temperature Range of -40°C to +70°C
Relative Humidity of 10 -95%, non-condensing

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* Bio-accumulative is defined as substances which accumulate within living organisms.
** Lead, Cadmium and Mercury are heavy metals which are Bio-accumulative.

Mercury Statement (LCD Monitor, LCD TV, DLP Projection TV, Projector for USA only)

LAMP(S) INSIDE THIS PRODUCT CONTAIN MERCURY AND MUST BE RECYCLED OR DISPOSED OF ACCORDING TO LOCAL, STATE OR FEDERAL LAWS
For details see lamprecycle.org, eiae.org, or call 1-800-Samsung

PRODUCT INFORMATION (Image Retention Free)

LCD Monitors and TVs may have image retention when switching from one image to another especially after displaying a stationary image for a long time.
This guide is to demonstrate correct usage of LCD products in order to protect them from Image retention.

- **What is Image retention ?**
  During normal operation of a LCD panel, pixel image retention doesn't occur. However, if the same image is displayed for a long time, a slight difference in electric charge accumulates between the two electrodes which encase the liquid crystal. This may cause the liquid crystal to build up in a certain areas of the display. Thus, the previous image is retained when switching to a new video image. All display products, including LCD,are subject to image retention. This is not a product defect.

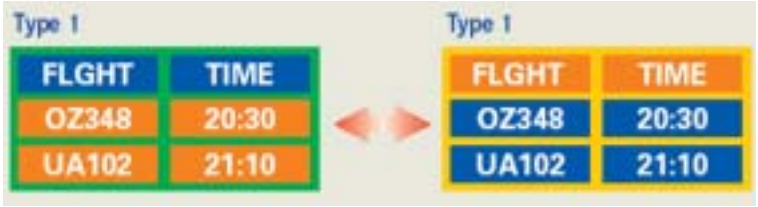
  Please follow the suggestions below to protect your LCD from image retention

- **Power Off, Screen Saver, or Power Save Mode**
  Ex)
  - Turn the power off when using a stationary pattern.
    - Turn the power off for 4 hours after 24 hours in use
    - Turn the power off for 2 hours after 12 hours in use
  - Use a Screen saver if possible
    - Screen saver in one color or a moving image is recommended.
  - Set the Monitor to power off with the PC Display Properties Power Scheme.

- **Suggestions for specific applications**
  Ex) Airports, Transit Stations, Stock Markets, Banks, and Controlling Systems
  We recommend that you follow set up of your display system program as below:

- **Display Information together with Logo or Moving image cycle.**
  Ex) Cycle : Display Information for 1 hour followed by a
  Display Logo or moving image for 1 minute.

- **Change the Color Information periodically (Use 2 different colors).**
  Ex) Rotate the Color Information with 2 colors every 30 minutes.



Avoid using a combination of characters and background color with large difference in luminance.
Avoid using Grey colors, which can cause Image retention easily.

- Avoid: Colors with big difference in luminance (Black & White, Grey)

Ex)

- Recommended settings: Bright colors with little difference in luminance

- Change the characters color and background color every 30 minutes

Ex)

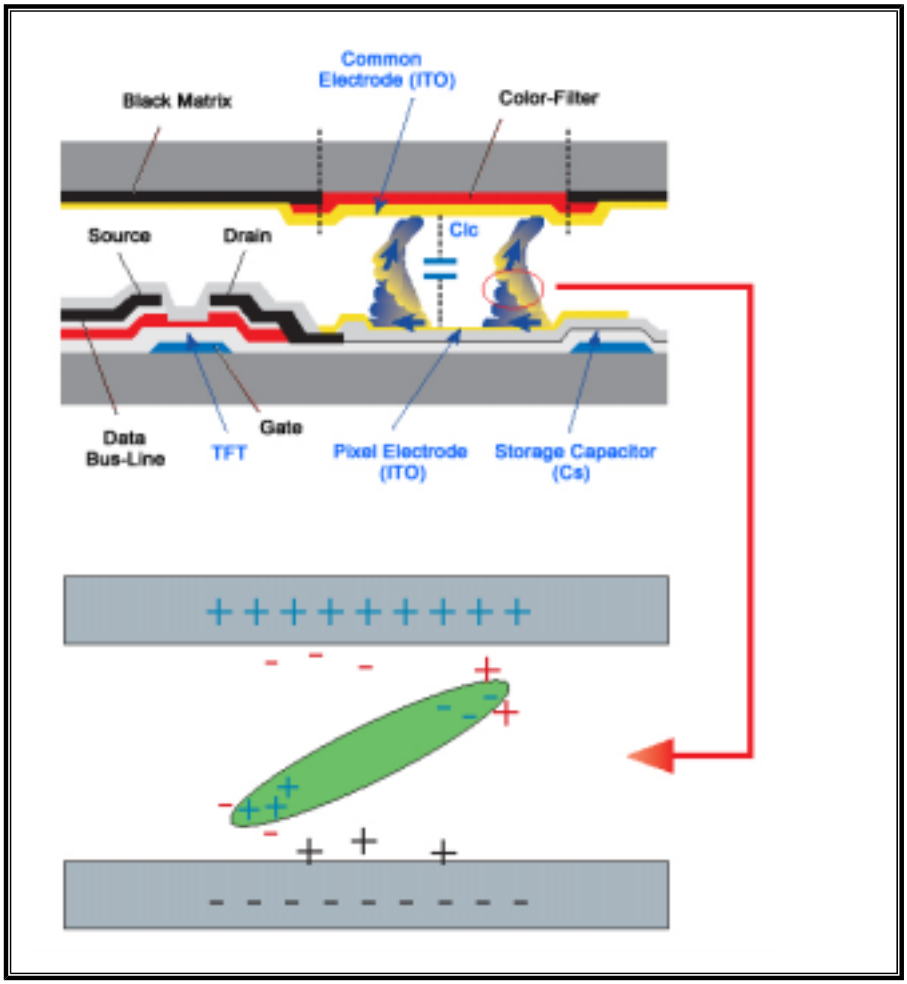
- Every 30 minutes, change the characters with movement.

Ex)

- **The best way to protect your monitor from Image retention is to set your PC or System to operate a Screen Saver program when you are not using it.**

  Image retention may not occur when a LCD panel is operated under normal conditions.

  Normal conditions are defined as continuously changing video patterns. When the LCD panel is operated for a long time with a fixed pattern (-over 12 hours-), there may be slight difference in voltage between electrodes that work the liquid crystal (LC) in a pixel. The voltage difference between electrodes increases with time, forcing the liquid crystal to lean. When this occurs, the previous image may be seen when the pattern is changed.
  To prevent this, the accumulated voltage difference must be decreased.



- Our LCD Monitor satisfies ISO13406-2 Pixel fault Class II